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Griseofulvin—Indications and Expectations

By

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There is a fair likelihood today that any patient who seeks medical attention for any skin eruption will receive Griseofulvin. It is a common misconception that the majority of skin eruptions, particularly in warm climates, are mycotic. In reality, only a rather small percentage of patients who receive topical fungicidal agents actually have fungal disease. Misapplication of topical fungicides is a comparatively harmless practice. Usually nothing happens and the patient is thought to have a recalcitrant fungus, resistant to ordinary treatment. Many of these patients who have neurodermatitis, seborrheic dermatitis, etc., are now taking Griseofulvin.

Griseofulvin is the newest of the wonder drugs. It is the first orally effective antifungal antibiotic. It is not, contrary to the impression given by popular magazines, a cure-all. Griseofulvin is extremely effective against most fungal infections which also respond well to simple, inexpensive, topical remedies. It is considerably less dramatic in its effect on the notoriously chronic Trichophyton rubrum infections.

The area of real usefulness of Griseofulvin will be in the treatment of tinea capitis. With this drug all types of ringworm of the scalp can be cured, provided resistance of the fungus does not develop through haphazard administration of the drug. Those who have the noninflammatory types of infection can now be cured without the ever-risky, time consuming, and mentally traumatic X-ray epilation.

It is hoped that Griseofulvin will be handled with more respect than some of the other wonder drugs have been. Toxicity, while generally low, is still a real danger. The price, while more moderate than some antibiotics, certainly will be prohibitive if the drug is used with the same abandon that characterizes prescription of the topical fungicides.

THE DIAGNOSIS of superficial fungus infection is often a hope borne of desperation, rather than a conviction based on mycologic evidence. The physician hopes that the disease is fungal so that he will not have to worry about whatever else it may be. The hope that any given skin eruption may be fungal is so prevalent in the minds of so many practitioners that there is now the very widespread belief that almost all skin eruptions are of fungal etiology. So much so that the diagnosis of superficial fungal infection is probably the most overworked in medicine today. So much so, indeed, that the word fungus is fast losing its meaning, in the way that the words "Allergy" and "Eczema" have lost their specific connotations for all but a highly specialized few, because of promiscuous misapplication. I suspect that the drug companies missed two real money making ideas by not having marketed products called "allergicidal ointment" and "eczemacidal ointment." They have certainly sold vast amounts of fungicidal ointments.

The non-dermatologist can hardly be expected to entertain a complex differential

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diagnosis and to do tissue examinations or cultures every time he encounters a skin eruption. He may not be able conveniently to consult a dermatologist in every case or he may be reluctant to call for help on what is apparently a "simple fungus infection." There is an option, however, which looks attractive. He can give the patient a therapeutic trial with a fungicidal drug. It might work, and if not, time then to start worrying about differential diagnoses and consultations.

In the past this therapeutic trial did little harm. A few dermatoses were aggravated by the fungicides and there was an occasional contact dermatitis. Effective treatment was delayed for a while; yet, other than being a diagnostic measure of comparatively low efficiency, it was not a highly objectionable practice.

There is today, however, a bigger and more attractive therapeutic trial. Its name is Griseofulvin. This is the new drug which has brightened and strengthened the prevailing hope that any given dermatosis will be a fungal infection. The hope is fervently echoed by millions of patients with chronic skin diseases. They have read in popular magazines and newspapers of the new wonder drug which will cure fungal infections. To many of these patients the word fungus means chronic skin disease and nothing more. It is not surprising, therefore, that patients everywhere are applying pressure on physicians to prescribe Griseofulvin in treatment of a grand variety of non-fungal conditions. What is surprising is the willingness of many physicians to yield to this pressure, substituting for clinical indications a blithe hope for the best.

Griseofulvin has not yet been generally available to most military physicians in Southeast Asia. For this reason I have been privileged to see a great many patients who otherwise might have been treated elsewhere. Many patients have been referred by physicians; others have come on their own initiative, hoping to try the new drug. Some were already taking Griseofulvin which was prescribed elsewhere, and they came to me to maintain their supply. I can attest to the fact that Griseofulvin is being used in many cases where no indication for its use exists. As has been pointed out earlier, the use of a topical fungicidal agent where some doubt exists as to its need is generally neither very expensive nor fraught with danger to the patient. The careless misuse of Griseofulvin will certainly be both expensive and potentially harmful.

It is felt that a general review of indications for and expectations of Griseofulvin therapy will be of value to the many service physicians who may wish to use the drug.

Griseofulvin is an orally effective antifungal antibiotic which is derived from Penicillium species.[1] While the drug may have some effect on certain of the deep mycoses, notably Nocardia and Sporotrichum,[2] let us restrict our comments here to the superficial fungal infections. Griseofulvin can be expected to cure or at least control a majority of infections caused by the three common genera of dermatophytes, the Microsporum species, Epidermophyton floccosum, and Trichophyton species. It is not effective against Candida albicans, the common "Monilia" which causes such distressing cases of intertrigo and monilial infection of the nails. It has no effect on Malazzesia furfur, the causative organism of Tinea versicolor. It has no apparent effect on eczematous eruptions which are not of fungal etiology, and it might be a good idea to repeat that these far outnumber the fungal eruptions. Since the average practitioner may not always have the benefit of an exact mycologic diagnosis to guide him perhaps a few generalities may help him to recognize some of the few cases in which Griseofulvin is *not* indicated:

First: Fungal infection of the ear canals. Griseofulvin will not influence these for the simple reason that no such thing exists. This is one of the examples of the loss of meaning of the word "fungus." For all practical purposes there is no such thing as a pathogenic fungal infection of the ear. It is true that one can occasionally see colonies of Candida, Aspergillus, Penicillium, and other

fungi growing in ear canals and on tympanic membranes. These organisms are generally saprophytes—fortuitous invaders. Even if they did cause disease they are not in any way affected by Griseofulvin. Neither are seborrheic dematitis or bacterial infection, which usually account for dermatitis in this area.

Second: Fungus of the scalp in adults. This is rare, and when it is suspected it should be treated by a competent dermatologist who can make an exact mycologic diagnosis.

Third: Athlete's foot in young children. A generality which approaches absolute verity is that athlete's foot does not occur in prepubertal children. Eczema of the feet and hands is common among children but one cannot expect Griseofulvin to help.

Fourth: Monilial infections of the glabrous skin or of the nails. Candida (Monilia) albicans is a common cause of intertriginous dermatitis and of onychomycosis. In the groin, axillae, and inframammary areas the disease usually appears first as a papular eruption, quickly followed by a beefy red, moist, glistening inflammation of the skin which is acutely uncomfortable to the patient. The wet, red area of inflammation is surrounded by numerous satellite, follicular papules. The monilial onychomycosis is characterized by separation of the nail, often irregularly, from the nail bed. There is no thickening of the nail plate, nor is there any appreciable accumulation of debris under the nail. I have seen numerous patients with both types of infection who were taking Griseofulvin. It will not help.

Fifth: The nails which are distorted by psoriasis or by chronic eczematous eruption of the skin of the hands or feet. These are very common and are often difficult to distinguish from nails actually infected with the Trichophytons. A good, non-technical clue may be had by asking whether the nails have ever cleared up in the past and then got bad again. If this has happened one can bet that Griseofulvin will not help, because the disease is probably not fungal.

Sixth: Inflammatory lesions of the scrotum and penis. These may be monilial or they may be contact dermatitis from medications. Neurodermatitis is frequently found in these areas. The dermatophytes, however, do not affect the scrotum, penis, or perianal areas except very rarely.

Seventh: Any ringworm or superficial infection which can be cured or controlled by local measures. Let us remember that it is usually desirable to use topical agents, where they will work, rather than systemic drugs, which always carry the risk of systemic reactions.

Let us now consider the infections which will respond to Griseofulvin therapy. The three genera with which we are concerned are known as the superficial dermatophytes. They are the Microspora, the Trichophyta, and the single species Epidermophyton floccosum.

Epidermophyton floccosum is rather common cause of "athlete's foot" and "jockey itch." It causes glabrous skin infection in adults and usually is quite amenable to therapy with almost any of the topical fungicidal agents. It also responds beautifully to Griseofulvin therapy but where is the need when local agents work so well?

The Microspora must be considered in two categories—the scalp and hair infections, and the glabrous, or non-hairy infections. Ringworm of the scalp will be considered later. I may say now that these are very definite indications for Griseofulvin therapy. The glabrous skin infections, by themselves, are not. The Microspora are the chief causes of typical "ringworm" in children. These are the ringlike lesion which may appear in random distribution on the nonhairy skin. They have a distinct border, a tendency to clear in the central area of the lesion, and are usually quite sensitive to treatment with almost any topical fungicide. There is no need for Griseofulvin if the scalp is not involved.

The Trichophyta comprise a large group which can cause glabrous skin, hair, and nail infection. They are often quite stubborn. Ringworm of the scalp caused by Trichophyta will be considered later. I can say now that

any Trichophyton infection of the scalp deserves treatment with Griseofulvin. Infections of the non-hairy skin with members of the Trichophyton group can be controlled with Griseofulvin. Whether they can be cured remains to be seen. The common offenders, among Americans, are Trichophyton rubrum and Trichophyton mentagrophytes. Trichophyton tonsurans and Trichophyton violaceum are being encountered more and more commonly as infecting agents in ringworm of the scalp and will be considered later.

When we attempt to generalize, as we certainly are doing, there is always the problem of how to keep from becoming too specific. There is no good way to generalize on the Trichophyton infections except to say that they are fairly common and that they will respond, temporarily at least, to therapy with Griseofulvin. This is hardly sufficient information upon which to establish a usable rule of thumb. There is certainly no need to treat them all with Griseofulvin, since those caused by Trichophyton mentagrophytes generally respond well to good hygiene and the very skimpiest of local measures. Occasionally one sees an extremely acute, pustular eruption of the feet caused by this organism and it is necessary to hospitalize the patient because he cannot walk. These patients respond well to bed rest, soothing cool soaks with dilute Burow's solution, and nothing more. In my limited experience Griseofulvin has never once shortened the hospitalization period in such a case. Once acute symptoms have subsided the patient can be given almost any fungicide and it will work. I prefer alcoholic Whitfield's solution for use in the tropics. What we have said about the feet applies also to acute eruptions in the groin. Soothing, conservative therapy followed by a non-greasy fungicidal preparation, after the inflammation has subsided, will almost always work.

Unfortunately, these glib reassurances do not apply if the infecting organism happens to be Trichophyton rubrum. This is an organism which causes disease of the skin and nails and which is most difficult to cure, if, indeed, it can be cured at all. It may affect huge areas of the body or it may remain localized for many years in one area. It is quite common to find only one foot or one hand, or even one small portion of a foot or hand involved. Usually the skin's reaction to infection with this organism is slight. There is some redness and scaling, but this is not generally dramatic. Itching may be mild or even absent.

In the well entrenched case of Trichophyton rubrum infection topical fungicides are usually of little assistance. Here, then, is certainly an infection which cries for a new drug. Here is a major area of usefulness for Griseofulvin, but there is also a catch. While Griseofulvin will cause the clinical signs of infection to disappear, the patient does not stay cured unless he continues to take the drug in full dosage, at least for as long as he remains in a tropical climate. The dosage or duration of treatment does not appear to be important. When the chronic Trichophyton rubrum patient discontinues taking the drug his disease is apt to recur. Whether this is relapse or reinfection is not important. What is important is the well-known[3,4] fact that these patients have a constitutional deficiency in their ability to defend against this organism. There are dermatophyte inhibitor substances in normal human serum. These substances keep the superficial fungal infections superficial. Without them the fungi readily invade deeper tissues.[5] It has been shown conclusively that those persons who harbor Trichophyton rubrum are measurably deficient in these dermatophyte inhibitors.[6] Griseofulvin will not correct this basic immunologic defect. Therefore, when one starts to treat a Trichophyton rubrum infection, particularly if finger or toenails are involved, one must face the necessity for continuing therapy for a very long time. I have been amused by patients who say that they have tried Griseofulvin for nail infection but abandoned the treatment after a few weeks because the nails did not seem to improve. Of course, the treatment of infected nails may take many months, particularly in the case of toenails. It seems hardly worthwhile

to start treatment in a person who has no disability or discomfort from two or three infected toenails. The patient stands to gain practically nothing in exchange for the hazard, inconvenience, and expense of long-term systemic therapy. One does not even have the assured satisfaction of eradicating a focus of infection.

In treatment of Trichophyton rubrum infections of the glabrous skin one may achieve very gratifying results with Griseofulvin in combination with rather aggressive local therapy. The lesions may be cleared initially with the combination and then may remain clear, apparently indefinitely, on local treatment alone. Generally, however, the patient becomes overconfident of his cure and relaxes his local treatment, only to find that his infection is ready and eager to reassert itself. For local treatment I have had very good results, after initial therapy with Griseofulvin, with daily application of alcoholic Whitfield's solution or of Verdefam, or with weekly painting of affected areas with 5% chrysarobin in chloroform. This latter is applied as an office procedure and is never dispensed for use at the patient's discretion.

When we consider the problem of ringworm of the scalp the problem of who needs Griseofulvin becomes absurdly simple. There is no need to beat around the bush trying to build up the story. The answer is: "Every child who has ringworm of the scalp." This is our major and desperate area of need for a drug of this type.

Leaving out all the confusing terminology of large spore, small spore, endothrix, ectothrix, there are three major varieties of ringworm of the scalp. There are those which may be expected to undergo spontaneous cure in a matter of a few months, those which will spontaneously clear at puberty, and those which may never be cured without drastic treatment. Local therapy does not generally alter the course of any of these.

It has been the usual practice in the past to identify the causative organism and then to treat conservatively with local measures for six or eight months in the hope of a spontaneous cure. If the organism was Microsporum auduini or one of the Trichophyton group then after this trial period X-ray epilation was done. This procedure is not necessary for infections with the other Microspora, because they can be expected to clear spontaneously and usually do so within the trial period. Microsporum auduini will clear at puberty, but this may be a long time to wait. The Trichophyta may clear readily or never. Even with the X-ray epilation procedure cure is not certain. This is a procedure which is awkward for both physician and patient. It is time consuming, hazardous in any but highly competent hands, and leaves the child a bald headed object of ridicule for a number of weeks. Nowadays, with the public ever more conscious of radiation hazards and ever more critical of medical good intentions, fewer and fewer dermatologists and radiologists care to do epilations.

The need for a new, effective, treatment modality was especially great in military overseas installations where competent treatment facilities are often sparsely situated. Griseofulvin will, apparently, fill this need.

Even with the Microsporum infections which can be expected to clear spontaneously Griseofulvin should be used. The period of waiting, scrubbing, applying smelly ointments, wearing skull caps, and possible wide dissemination of infectious material can be greatly shortened. In times past we were often glad to see kerion formation, for this heralded spontaneous cure. Now the infection can be cured without the child's having to risk a kerion. There is no need for painful, pustular, scarring lesions of the scalp.

Thus, unless the new drug proves to be more toxic than is anticipated at this point, it seems logical to treat all proven cases of ringworm of the scalp, regardless of type. It should be noted here that Griseofulvin can be washed out of the hair with water and alcohol.[7] The time honored nightly shampoo with tincture of green soap probably should not be recommended while the patient is taking the drug.

In regard to toxicity it is still too early to

predict all the possible side effects or allergic reactions which may occur. A great many have already been reported.[8,9,10] They include headache, nausea, vertigo, abdominal cramps, skin rashes, fever, mild depression of white blood count, and many others. Most of these reactions have been relatively harmless so far, but it will be necessary to be alert to the possibility of serious reactions. Since Griseofulvin is derived from the Penicillia it is still under rather strong suspicion as a possible allergen.

Whether or not clinical resistance of fungi will develop to an unmanageable degree is still to be learned. *In vitro* experiments indicate the possibility,[11,12,13] and the possibility should be considered every time the drug is dispensed.

In summary Griseofulvin is not a cure-all. It is extremely effective against certain types of fungal infection, namely, those caused by Microsporum species and Epidermophyton floccosum. It is these same infections, however, which respond quite well to ordinary, local therapy with keratolytics and fatty acid compounds. To a degree the same may be said of the Trichophyton infections. Many of these are also amenable to simple, inexpensive, topical therapy. The commonest exception is the notoriously chronic Trichophyton rubrum infection, which in many cases cannot be cured at all. Griseofulvin has no effect on Monilial infections, Tinea versicolor, and non-fungal eruptions. Its most valuable area of usefulness is in its ability to cure ringworm of the scalp. It is effective in all types. While it is true that spontaneous cure can be expected in many cases within a few months it is not desirable to have these reserviors of infection in the community any longer than necessary. It will also reduce morbidity and scarring from kerion formation. It will eliminate or reduce the need for costly, time consuming, hazardous, and mentally traumatic X-ray epilation. Toxic effects and allergic reactions so far reported have been mild but remain a potential limiting factor in the use of this new drug.

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Army Doctors—Pioneers and Pacemakers

Many Excelled Beyond the Horizon of Their Profession

By

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ARMY doctors (physicians) constitute the Medical Corps,† one of the Army's oldest branches. Actually, for 185 years, Army doctors have cared for the sick and wounded in all our wars. Medicine was their profession and soldiery their career. But the Army could not always promise them professional advancement, while opportunities abounded elsewhere, to which many turned and with marked success.

Names like Beaumont, Reed, Gorgas, and those of many other Army doctors are immortalized in history for their medical benefits to mankind. Little known, however, are the great deeds of such men in varied other areas. Army doctors have pioneered in fields related to such activities as adjutant general, signal, transportation, quartermaster, ordnance, engineer, and chemical warfare. Some have served as Secretary of War, Army Chief of Staff, branch chiefs, and as Assistant to The Inspector General. Others attained renown as civil government administrators, meteorological experts, and in the establishment of libraries, hospital planning and construction, and organization-management.

Our Country's first official meterologic records were initiated by Doctor James Tilton, Physician and Surgeon General of the Army, on April 2, 1814. This marked the beginning of systematic meteorologic observations, and the United States Weather Bureau traces its origin to the Medical Department of our Army.

Army Surgeon George M. Sternberg, commended for his conduct in battles of the Civil War, was something of an inventor. He patented an automatic heat regulator and developed an anemometer and a fruit drier. Also, he became an outstanding pioneer in the field of bacteriology, and, in 1893, established the Army Medical School.

FIG. 1. Caduceus.

Albert J. Myer, an Army Surgeon, in 1858, devised a signaling system which proved most useful during the Civil War. By Act of Congress he became Army signal officer on June 27, 1860; later, organizing and commanding the new Signal Corps. In 1869, upon his recommendation, Signal Corps activities were expanded to include sending out storm warnings. A year later the United States Weather Bureau was established, and operated under his supervision for its first ten years. Fort Myer, Virginia, commemorates his name.

Jonathan Letterman, Medical Director of the Army of the Potomac, devised a system of evacuation of the wounded from the battlefield which is still basically in use today. His

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† A component of the Army Medical Service. The others are the Dental Corps, Veterinary Corps, Army Nurse Corps, Army Medical Specialist Corps, and the Medical Service Corps.

U. S. Army Photo

FIG. 2. Major A. J. Myer standing in his tent, Peninsula Campaign, Virginia, summer 1862. From small photo in Myer Papers, Fort Monmouth, N.J.

three-fold plan involved ambulance corps, method of supply, and field hospital system—all designed to operate as a whole.

Colonel John Shaw Billings, Medical Corps, was detailed to the Treasury Department in 1869, where, until 1874, he served as consultant to the Marine Hospital Service, predecessor of the Public Health Service. The following year he began plans for the building, organization, and administration of Johns Hopkins Hospital. In 1896 he was chosen to organize the New York City Public Library, and he planned the new building which opened in 1911. He had previously made the library of The Surgeon General's Office the greatest medical library in the Country. It is now the National Library of Medicine.

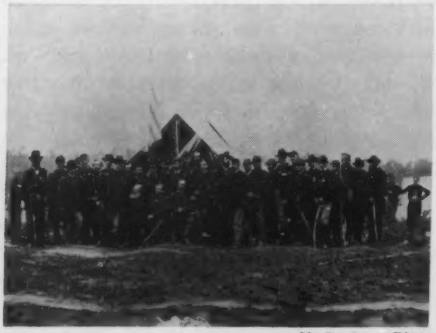
The London Times of July 22, 1915 paid tribute to Billings, stating

"Before 1880, when Doctor Billings took charge of the vital statistics of the United States Census, they were worse than useless. . . ."

Billings also made noteworthy contributions in the field of ventilation engineering, writing many reports and papers on the subject, and was regularly consulted on problems involved in ventilating the Capitol in Washington.

Surgeon Fred C. Ainsworth, in 1886, reorganized the Record and Pension Division of The Surgeon General's Office. Eventually he became The Adjutant General, with rank of major general, retiring at his own request in 1912.

Major Edward L. Munson, MC, in 1912, devised the "Munson Last" for Army shoes, which was later adopted by many civilian shoe manufacturers. In 1918 Mun-



U. S. Army Photo

FIG. 3. General George G. Meade and staff of thirty-four. In this group, though not identified are Army Surgeons Johns S. Billings, James T. Ghiselin, and Thomas G. McKenzie.

FIG. 4. Maj. Gen. Fred C. Ainsworth, Adj. Gen.

son was detailed to the War Department General Staff. As brigadier general, he organized the Morale Branch of the Army, and, in 1921, published *The Management of Men,* adopted as a War Department textbook. Munson Army Hospital at Fort Leavenworth, Kansas, was recently dedicated in his honor.

Medical Director of the American Expeditionary Forces (1917-1918), and cited by General Pershing for exceptionally meritorious service, Major General Harry L. Gilchrist served as Chief of the Chemical Warfare Service from 1929 to 1933.

In more recent years, Colonel Calvin Goddard, MC, became a world-renowned expert on ballistics. His studies provided crime laboratories precise information regarding the exact gun used in crimes. He also compiled statistics on rifling characteristics of all types and varieties of guns.

Major General Howard McC. Snyder, White House Physician during President Eisenhower's administration, in 1940, served as Assistant to The Inspector General. In 1946, he was assigned to duty with the Advisory Group of the Army Chief of Staff; and, in 1951, was assigned to the U. S. Army

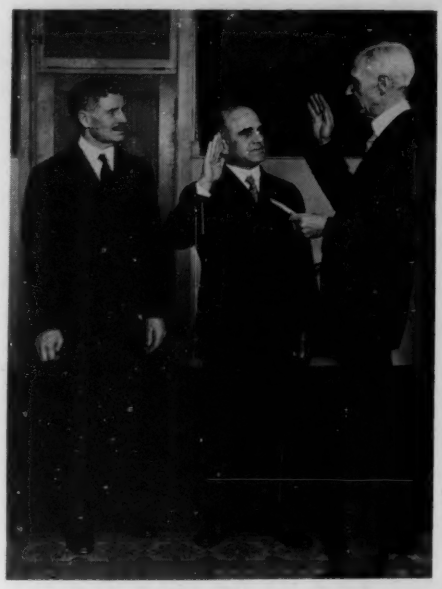


FIG. 6. Gen. Gilchrist taking oath as Chief of C.W.S. (L to R): Gen. Fries, A.A.; Gen. Harry L. Gilchrist and Col. C. C. Coombs (1929).

U. S. Army Photo

FIG. 5. Brig. Gen. Edward L. Munson, MC. (1932)

U. S. Army Photo

FIG. 7. Capt. Leonard Wood and mule "Shafter."

U. S. Army Photo

FIG. 8. Maj. Gen. Leonard Wood.

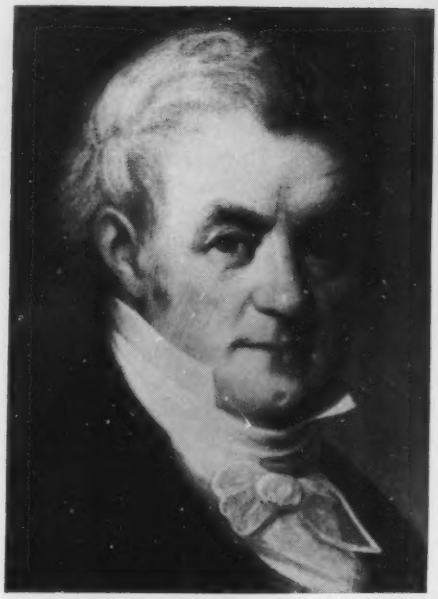


FIG. 9. William Eustis (Mass.), Secretary of War, April 8, 1809-Dec. 31, 1812.

Element of the Supreme Headquarters, Allied Powers in Europe.

No former Medical Corps officer has enjoyed so great contemporary fame as General Leonard Wood. He achieved an outstanding record as administrator and governor general in Cuba and the Philippines and as Army Chief of Staff (U. S. Army). Wood won the Medal of Honor for extreme bravery in campaigns against the Apaches in 1886. Though an Army doctor, he commanded a detachment of infantry. While Chief of Staff he enjoyed the prerogative of substituting at times for the Secretary of War. At the 1920 Republican National Convention in Chicago, Wood led on the first four ballots for the Presidential nomination. Fort Leonard Wood, Mo., commemorates his name.

Two physicians who served in the Army at the time of the Revolution each became Secretary of War: William Eustis, for whom Fort Eustis, Va., is named, served under Presidents Jefferson and Madison. James McHenry as Secretary of War under Presidents Washington and Adams. Fort McHenry, near Baltimore, Maryland, is named in his honor. Both these Army doctors had also served as Members of Congress.

Some of the leading physicians of the Revolutionary period served as commanders of troops, not as surgeons. Today, Army doctors have unlimited opportunities within their profession, and there are available to them 28 or more medical officer specialities. But they can continue to gain recognition as both *pioneers* and *pacemakers,* for history is still in the making.

Suicide as a Complication to Group Psychotherapy

By

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DURING W. W. II, while on active duty with the Navy, I used group psychotherapy extensively, and although I have used this technic for the past thirty-six years, I have modified the procedure from time to time, as I have realized it may be hazardous if not properly applied. In civilian practice, it has become evident that all patients selected for analytic group psychotherapy should be seen at least ten hours in private sessions before starting in the group, as it is necessary for the therapist to have an adequate history of each patient and to establish good rapport. On joining the group, each person should be required to pledge absolute confidence within the group, and only given names should be used in introducing the patients to each other. Each group is best composed of eight to ten patients, and should last for a full two-hour period not less than once a week. There should be no limit to the length of time each person can remain in a group.

If a member of the group becomes unduly anxious, he should be reassured by individual treatment. Thus, the patient is fortified against any destructive effect from misunderstanding and he is advised to make a distinction between his own neurotic reaction and the true attitude of the group. It has to be realized that there is a possibility that his attitude is an irrelevant and irrational distortion of reality, and that the group association will help him to build up an immunity to his fears. It should be emphasized that he was not being singled out as a psychiatric problem, and that there are many others in the community who suffer from emotional disturbances similar to his own.

The members of a group are so sensitized by their particular neurotic symptom-complexes that they accurately discern the significant points brought out in the discussion. Under individual treatment, the patients necessarily review the details of their lives, but in the group setup, the patients put on a veneer of protection and quite frequently present much different personalities than when seen in private.

Since sexual conflict is such an important part of most neurotic behavior, the sexual factors in the individual's development are sooner or later brought out. The majority of the individuals at first discussed their sexual experiences with reluctance, especially in the group setting, as sexual discussions had usually been prohibited in the original family setting. It has to be pointed out that unless the patient frees his own sexuality, he obviously will be unable to make an adequate recovery. Once the initial resistance is broken down, there is usually little difficulty in getting the patient to discuss such fundamental matters. Every therapist realizes that confession has a catalytic effect in producing similar uninhibited discussion by others. Emboldened by the revelations of others, either in questions or discussion, each member of the group soon sees his counterpart and has less difficulty in exposing his particular difficulty.

Since the psychiatric patients generally suffer from severe lack of self-confidence, which hinders them from utilizing their potential assets, they gain courage to face their problems if they are given sympathetic understanding by the group. The problems of dependency, which are so well-known in individual therapy, are less troublesome in group therapy, as the patient tends to feel that the support comes from the group rather than from the group leader. This state of affairs is more acceptable in that no obligation to any single person is incurred, and excessive transference can thus be prevented. The group sessions also help the in-

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dividual patient to break his transference or dependency on the psychiatrist.

In the group, there is an opportunity to simulate attitudes or situations which may have caused the patient trouble. Thus, the patient becomes aware of his inappropriateness of action in his everyday life. In the group setting, the patient at times competes for the psychiatrist's attention and struggles for status in the group. The differences in background and outlook amongst the individual patients, transference reactions to other members of the group, and the need for social approval all afford ample opportunity for activation of emotional factors.

In private psychotherapeutic sessions, the patient is expected to explore himself without reservation, while the psychiatrist tries to keep himself in the background and maintain as far as possible a completely impersonal and permissive attitude. This sort of relationship is necessary in individual treatment, as obviously the therapist cannot take a stand on right and wrong, although in the light of all the facts, the behavior of the patient might be very unacceptable to the world at large. As a result of these private sessions, the patient might be left uncertain as to how others might react, and the patient may be left to test his attitudes outside of the office. The group situation therefore assists the individual in this transition.

Patients in the group situation represent a family constellation and thus find themselves in an environment that is more like society in miniature. Members of the group represent the different types of individuals that the patient is up against in his everyday life. Obviously, the individual has been raised to surround himself with a veneer when he faces the world, while in the therapeutic group, the attempt is made to get the patient to discard this veneer and to express his feelings as they come to the surface. Thus, in these group sessions, the patients tend to express their feelings more honestly and directly than in ordinary social groups. The group environment offers both incentive and opportunity for the patient to test his attitudes with respect to social reality, and if he finds that he is unable to correct the inappropriate reactions in the group sessions, then he at times may retreat emotionally.

Since the majority of my patients in group have been married, it was necessary for these patients to return to his or her spouse. At times, the spouse criticized the patient and precipitated a crisis. If the spouse were interviewed, the patient might become apprehensive and had a feeling that perhaps some of the confidences that had previously been brought out would be revealed to the spouse, so I always had the patient present during the conference. In the group situation, information of similar type could be brought to the surface without a feeling the confidence had been abused.

In the group setting, the urge to express conflict through "acting out" is more natural than a "thinking out" type of expression. Here, a patient deals with conflict by projecting it into a relationship; he lives it out with the other persons. In this manner, inner unconscious conflicts are translated into outer conscious conflicts. It is this "acting out" relationship which enhances the discharge of emotional tension. In this setting, the psychiatrist tries to work with the irrational elements of the conflict, not in the form of phantasy, but rather in those forms which are projected onto the social scene. Because of the selective nature of the group process, however, some kinds of unconscious conflict remain totally inaccessible.

The group situation provides a wide range of possibilities, nevertheless, for the testing of reality. In this setting, social reality is not a fixed entity, but each member of the group, and each pattern of relationship personifies a given form of interpretation of social reality. In this sense, social reality is constantly changing and is represented by multiple interacting concepts, rather than by a single fixed interpretation. Each patient tests out on the group his fear of the real world, and his fear of his own impulses. In this setting, the clash between his impulses and the standards of social re-

ality offer a chance to expand his emotional orientation to his own nature and the nature of society. This type of voyeurism is certainly significant self-exposure, but it may activate the death wish and encourage the group member to commit suicide.

Two Suicides

During an eight-year period, 150 psychiatric patients attended analytic group psychotherapy, and of this number, two patients destroyed themselves, a woman and a man.

The woman was 36 years old, was married 13 years, and had two children, a girl, 10, and a boy, 7. She suffered from attacks of asthma and was diagnosed to have a Conversion Reaction. Her husband was an intellectual person and had made her feel very inferior. They had immigrated from Sweden. She had lived a frustrating life with her husband, for he seldom made love to her and treated her more or less as a housekeeper. She stated that she had "bottled up her feelings all her life." Her husband had frequently accused her of being selfish and of not properly caring for the children. She spent 58 hours in individual psychoanalytic psychotherapy and had attended 10 sessions in group psychotherapy. She missed one group session because of a virus infection which kept her in the house for a week. Then one morning she called and said she would be back to group, but about 4 P.M. she went out into the garage and asphyxiated herself by turning on the car motor.

Six years later, another group member committed suicide. He was a married man, 45 years old, and had one child, a boy, 9. He had not married until 32 and had been afraid of women. He never could confide in his wife, who had frequently been critical of him and called him a hypochondriac. He felt he had to take pills for a stomach disturbance. He hated to attend parties. He was diagnosed to have an Obsessive Reaction. He spent 56 hours in individual psychoanalytic psychotherapy and had attended 43 sessions in group psychotherapy. One Saturday, after attending group, his wife insisted that they attend a drinking party, and the next morning she made fun of him because he insisted on taking a dose of tranquilizers. He left the house and went to the shipyard to work on his sailboat. He found a plastic bag, tied it over his head, and suffocated himself.

Both these patients felt inadequate sexually, had dominant spouses, and were fearful of their homosexuality. They felt inefficient as parents and felt guilty about their relationship with other people. They each resented the spouse and had frequently doubted the wiseness of their marriage. Neither could adequately drain off the aggression that had built up over the years.

Discussion

Much has been written about the causes of suicide, and it is evident that the etiology may be revenge for some fancied wrong, inability to express aggression, fulfillment of honor, an attempt to get attention, or a wish to have another chance "to be born again." In these two cases in group, it was obvious that they each had been unable to stand up to the marriage partner and the members of the opposite sex. They did not have the courage to assault the offensive spouse and had been unable to release this pent-up hostility in the group situation, so had turned it against self. It was evident that the disapproval of the group and perhaps even the lack of approval of the parent surrogate—the group leader—were factors in causing these patients to inflict self-destruction.

A report by Eli Robins after a study of 134 persons who committed suicide brought out the fact that the only effective way of reducing suicide is to hospitalize all suspected cases in a closed ward. This is obviously impossible in handling cases such as the above, who have been assigned to group therapy. I pointed out in a recent article that every person at some time considers self-destruction, but, as Robins states, "The problem is one of deciding who is the potentially suicidal person." He goes on to state that there are two large sub-groups of potentially suicidal persons, and these are those suffering from manic-depression and chronic alcoholism who communicate their suicidal ideas.

He emphasized that 49 per cent of the total group of 134 suicides were in these two subgroups. He further states that manic-depressive patients who have communicated their suicidal intentions are essentially serious suicidal risks, and that these patients require hospitalization, because 14.5 per cent of all manic-depressives will kill themselves in one or another episode of the disease. Although these findings are impressive, it is obviously impossible to follow his advice.

By more closely following up on the communications of the patients in the group situations, most of them can be "talked out of" their suicidal ideas, or perhaps they may need to be given deterrent shock treatment and then returned to the group.

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Too many Americans understand neither the nature of Communism, which they are fighting, nor their own way of life, which they need to be selling. Tyranny, not a free society, has always been the natural order of things in the world. Our way of life is unique on the face of world history, and we so far have found it difficult to explain it to others. DR. ALBERT BURKE, *Kansas City Star.*

Executive Effectiveness and the Hospital Administrator

By

COLONEL LOUIS E. MUDGETT, MSC, *U. S. Army**

A PROGRESSIVE hospital administrator, like any executive, must be concerned with his effectiveness; there are many factors to which he should devote his attention. The hospital administrator should ask himself these questions: Is executive effectiveness something that is predetermined? Is the executive able to predict his effectiveness in advance?

I believe that the executive is not able to predict his probable initial effectiveness. However, the good administrator will know what his effectiveness will eventually be from the long range point of view. Studying the background, training, and tenure of department heads to determine their perceptions of the administrative role could give him a useful tool and could provide him with an excellent starting point. The administrator must remain open-minded and realize individual differences, and comprehend the many variables which exist. He will find that people fall into patterns generally; but when he begins to think to specifics, he will become cognizant of individual differences.

The formal organization itself inherently provides many stumbling blocks to the progressive executive. It is necessary that he provide increased opportunity for participation, creativeness, and initiative if he wants to overcome the negative effects of the formal organization.

Our people are faced with work situations which create feelings of failure, frustrations, conflict, and tension. We spend a great deal of time thinking of the results of our executive behavior; we provide the executive leadership to the best of our ability; we study everything pertinent to the subject; and then wait for the expected results. Is it possible that the latent effects (what happened, but you had not anticipated it) may be of greater importance than the intentional effects?

We all know that society is changing and the art of science of administration is expanding to keep pace. It is highly dynamic. Technology is going ahead at such a pace that it influences all aspects of a life, to a degree previously undreamed of. In meeting this challenge, the following question comes to mind: In training and educating our people, are we going slowly enough?

The making of administrative changes deserves a great deal of attention and thought. The good administrator knows what employee response to an administrative change will be, because employees have participated in the change—and if the administrator has really sold it to them he might even let them consider it their own idea. I am not proposing this as a form of manipulation, but when your people believe that your ideas are their own you have succeeded.

If the hospital administrator applies all of the principles of democratic administration, there should be little variance in employee response to an administrative change, whatever the perceptions of his department heads of the administrative role might be. Research has not told us which perception is best. Should it be somewhat of a combination of the hierarchic and the democratic, with some of the "outer-oriented" thrown in? This is a question I would not presume to answer. A great deal more research in human relations is needed. Personalities, individual differences and many other extremely important factors play a strong role here.

Some of the more effective measures

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used in democratic administration which are worthy of consideration are:

1. The weekly conference with department heads—where all conferees have an opportunity and are encouraged to express themselves

2. Complete staff coordination, with department heads feeling free to criticize constructively

3. An administration forum once a month —conducted by the administrator and assisted by administrative department heads

4. Employees incentive award programs and employees suggestion programs

5. Gaining the respect of your people by example and performance, and not merely because of your status in the organization

6. Emphasizing individual thinking among your people, and always letting them know that their ideas are important and that their thinking is appreciated

7. Rewarding your confidence in your people by delegating responsibility to them

8. Providing incentives for improvement, and being fair and just in awarding recognition for outstanding performances of duty.

The pitfalls in democratic administration are many. The degree of tension, conflict, frustration, and inter-departmental hostility is definitely lower for the reason that democracy, by its very essence, provides for a continual blowing off of steam by all participants. But how much do we really know about these pitfalls? Employees feel less dependent, submissive, and passive to the administrator, and here, the skill of the administrator is of paramount importance. In his role as coordinator of activities, he must have a sixth sense, which defies description or explanation. He must practice preventive as well as positive administration, and he must be quick to detect employee attitudes. He must consider the strengths and weaknesses of his department heads. There is always the danger of people exceeding their authority and sacrificing greater goals for minor ones. This again calls for skillful administration. We still have a long way to go before we will know too much about the real pitfalls of democratic administration. At the present time there is not much to offer in the way of useful solutions. Perhaps our organizational structures lead to human difficulties. We should be aware of this possibility. Perhaps the whole crux of our problem lies in the area of human relations.

In "Liberal Arts and Leadership" in *Think*, January, 1958, Gilbert W. Chapman, President, Yale and Towne Manufacturing Company, said:

> "It has become increasingly apparent that the specialist cannot function effectively at the top level of management if all he brings to it is his specialty.
>
> "Managers must understand the people they manage. How well the executive understands human nature is the ultimate measure of his capacity for leadership. Education, and only education, can start the process which will bring this understanding to a man. Some of it will perhaps come from the study of psychology; some of it from the inspiration of great artists and writers; some of it from a study of history, which arouses feelings of respect and humility. As for the sciences, they bring to the young mind a discipline, a respect for truth, a desire for facts that will be valuable always in business or in any other career."

How can we apply this to hospital administration? How can we take advantage of it to overcome the pitfalls of democratic administration? In view of this, are our prerequisites for formal training in hospital administration adequate?

The progressive hospital administrator must always have an inquiring mind and must be aware of the value of extensive research on the part of others for his own use. The effective administrator must realize that whether or not he engages in research personally, advances in his profession are due in a very large measure to research. And he should be alert to keep himself aware of new findings. We all know even though we may not be consciously aware of it, that before we do any research we establish hypotheses. Our conclusions must be tested and retested not once but maybe four or five times. Our findings might be accidental. Maybe we were dealing with a peculiar group of people. In our research we will get nowhere unless we have firmly estab-

lished and accepted general principles.

We must give some attention to the use of research that can be or has been verified. In research, we state the questions—we state a tentative answer, we know what the information is and how we are going to gather it. We know how we are going to analyze it, after we get it.

One may argue that in science you are dealing with things and objects, and you can prove or disprove your hypothesis. When you deal with people, it is a different matter. I believe that just as the conclusions of scientific research have been changed in the light of new research—conclusions from research in human relations have been changed.

Administration is a science and, of course, the basic virtue of science is logical procedure. If we proceed logically, are our conclusions verifiable? You might say "Show me that it is true." Of course you either believe it or you don't—using a common sense approach. With this approach there is no scientific way to verify your conclusions.

Science insists upon every direct claim being verified, and if you are doing it in the name of science you must verify it. If you can't verify it, it was an accident. Good knowledge is knowledge that is verified. Do we know whether we prove it or verify it? We should not, for a minute, forget that science is not a panacea. Just because we set up an experiment, doesn't mean that we are going to come up with good knowledge. Much information is worthless. Why did we get the information in the first place?

In research, there are two criteria we should be concerned with—the criteria of truth and the criteria of significance. Truth is not the only important thing. We don't create knowledge for the sake of knowledge. We use it.

There are two words which are so often not asked: "So what." I believe we will make more progress if we use them more often.

The hospital administrator, like any executive, must be aware of those who come up with new thinking in administration and get their only satisfaction out of selling it—caring little about its ultimate success or failure. The proof of the pudding is still in the eating.

The hospital administrator will be effective when he wants to be and works at it. If he doesn't work at it, he will not be effective. It is as simple as that.

An Outbreak of Viral Hepatitis in the Mediterranean Fleet*

By

ROBERT W. MCCOLLUM, M.D.†

VIRAL hepatitis is considered to have a world-wide distribution but certain geographic areas consistently provide an increased risk of infection for the susceptible visitor or immigrant. This is presumably on the basis of local environmental conditions which provide the circumstances necessary for perpetuation of the disease in a highly endemic form. Studies of the incidence of hepatitis in the U. S. Navy have implicated the Mediterranean littoral as an area of particularly high endemicity.[1,2] The occurrence of an unusually large number of cases in this area in early 1959 prompted an investigation of the possible source or sources of infection.

Accurate hepatitis admission rates for the Sixth (Mediterranean) Fleet of the U. S. Navy are somewhat difficult to obtain because of constant changes in its composition. However, Britten[1] found that 79 per cent of the cases of hepatitis in the Atlantic Fleet, which includes the Sixth Fleet, were detected during periods of Mediterranean duty or within one month after leaving that area.

Hepatitis rates for Mediterranean shore-based Naval personnel offer a more reliable index of the disease in this area since the individuals at risk form a relatively stable population group. For a number of years these rates have been consistently higher than those for any other division of the Navy and have frequently reached peaks of incidence greater than ten admissions per month per 1000 average strength on an annual basis. These rates for the years 1957 through 1959 are compared with those of the Atlantic Fleet in Figure 1. On only one occasion (February, 1959) was the rate for the Atlantic Fleet essentially equal to that for the Mediterranean shore-based personnel. This peak rate for the former group is a direct reflection of over 150 cases of hepatitis reported among personnel of the Mediterranean Fleet during January and February 1959.

All patients were transferred from their ships to shore-based hospitals. Almost two-thirds of the group were ultimately transferred by air to the U. S. Army Hospital, Munchweiler, Germany, after temporary admissions to the U. S. Naval Station Hospital, Naples. The remainder were hospitalized at other U. S. military hospitals in the Mediterranean area.

CLINICAL FEATURES

For the purpose of this study all patients who were interviewed were hospitalized in either Naples or Munchweiler at the time. All had histories and laboratory findings consistent with icterus at some time during their clinical course. Reports from many of the ships indicated that there were a number of suspected cases of anicteric hepatitis in which the symptoms were relatively mild and of brief duration and in which the diagnosis was never confirmed. Most of these individuals were not transferred to hospitals and their total number is not known.

Of the 108 patients interviewed 90 per cent had an onset sufficiently acute to set the date rather accurately. Initial symptoms, frequently occurring in combination, were: fever (71%), chills (35%), headache (22%), anorexia (20%), malaise (19%), abdominal cramping (15%), nausea (14%). Less than 10% noted jaundice or dark urine

* This study was conducted under the auspices of the Commission on Viral Infections, Armed Forces Epidemiological Board, and was supported by the Office of the Surgeon General, Department of the Army.

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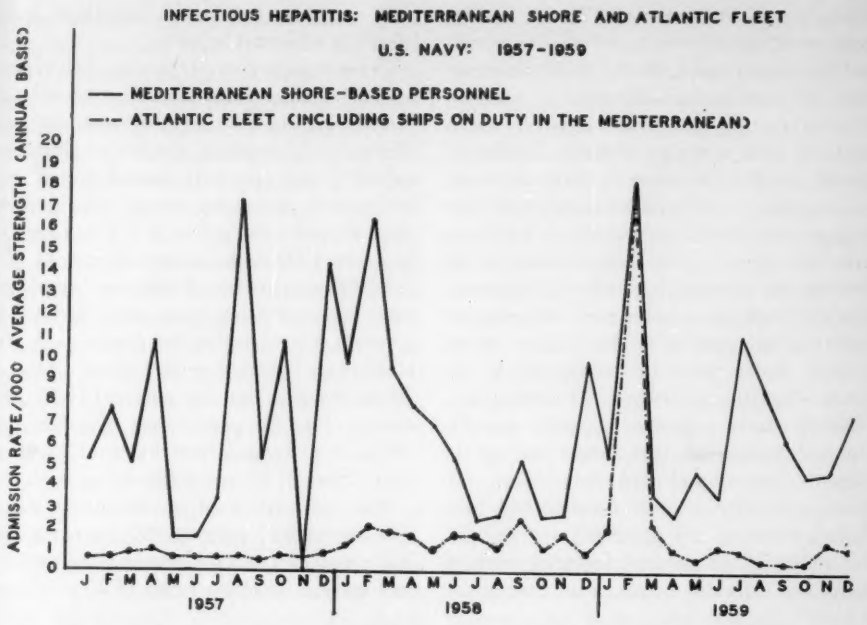
INFECTIOUS HEPATITIS: MEDITERRANEAN SHORE AND ATLANTIC FLEET
U.S. NAVY: 1957-1959
MEDITERRANEAN SHORE-BASED PERSONNEL
ATLANTIC FLEET (INCLUDING SHIPS ON DUTY IN THE MEDITERRANEAN)
ADMISSION RATE/1000 AVERAGE STRENGTH (ANNUAL BASIS)
0 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20
J F M A M J J A S O N D J F M A M J J A S O N D J F M A M J J A S O N D
1957
1958
1959

FIG. 1. Comparison of reported hepatitis admission rates among (a) the Atlantic Fleet—including the Mediterranean Fleet—and (b) Mediterranean Shore-based personnel of the U. S. Navy, 1957-1959. Although the rates for the latter group are consistently high, they are the result of relatively small numbers of cases in a population which is much smaller and more stable than that of the Atlantic Fleet.

as the initial symptom. Anorexia, nausea, and malaise predominated during the period following onset. Twelve patients (11%) complained of severe myalgia and/or arthralgia at some period during the acute phase of illness.

The duration of symptoms prior to the appearance of icterus or dark urine varied from less than one day to as long as ten days with an average of 3.5 days. Most patients felt relatively well within two to three weeks after onset except for residual fatigue and minor gastro-intestinal disturbances. Periods of hospitalization ranged from five to eight weeks at which time the patients were discharged to active duty. One patient had a recurrence of symptoms and abnormal tests of hepatic function two weeks after discharge from the hospital. Following another period of hospitalization recovery was uneventful.

There was one death. A 21 year old seaman noted anorexia for 3-4 days prior to the rather sudden onset of chills, fever, vomiting and icterus. He was admitted to a Naval Hospital that day and transferred to Germany by air. He became comatose and expired within 24 hours. Autopsy revealed massive hepatic necrosis and other findings considered to be typical of fulminant viral hepatitis.

EPIDEMIOLOGICAL CONSIDERATIONS

Serum vs. Infectious Hepatitis. The possibility that the epidemic could have been due to the virus of serum hepatitis was considered since there were two sources which were reasonably suspect in this population group. All personnel of ships of the Sixth Fleet had received influenza vaccine during the month of October 1958. As far as could be determined individual needles were used, usually with multiple dose syringes. Several features of the epidemic failed to support

this means of transmission: (1) the inoculations were spread over a period of a month and the major wave of the epidemic curve was restricted to a similar span of time, an unusual feature for serum hepatitis which tends to have a widely variable incubation period;[3] (2) the relative lack of cases among officers and senior enlisted men even though they were inoculated at the same time and were usually interspersed in the line-ups for vaccination; and (3) the occurrence of hepatitis in some men who received influenza vaccination at shore bases in the United States prior to assignment to the Sixth Fleet in late December. Tattooing as a possible source of serum hepatitis was discounted by the fact that almost half of the patients interviewed had never been tattooed and only a small number had been tattooed during the preceding six months. In addition, the clinical features, particularly the typically acute onset and fever, were more suggestive of infectious hepatitis than of serum hepatitis.

Chronological Considerations. The reporting of 140 cases from nine ships between 19 January and 14 February suggested the possibility of a common source of infection spread over a relatively limited period. For this period case rates among the involved ships ranged from a low of 2.4 to a high of 90.2 per 1000 with an overall rate of 20.5 per 1000 men at risk. As the number of new cases reported from these ships declined to a very low level during the fourth week, five other ships began to report cases, a total of 16 during a twelve day period (11-22 February). For this period case rates for individual ships ranged from 1.6 to 12.2 with an overall rate of 4.1 per 1000 men at risk.

The dates of onset of symptoms among 108 interviewed patients (95 from the first wave and 13 from the second) are depicted in Figure 2. Taking a range of 20 to 40 days

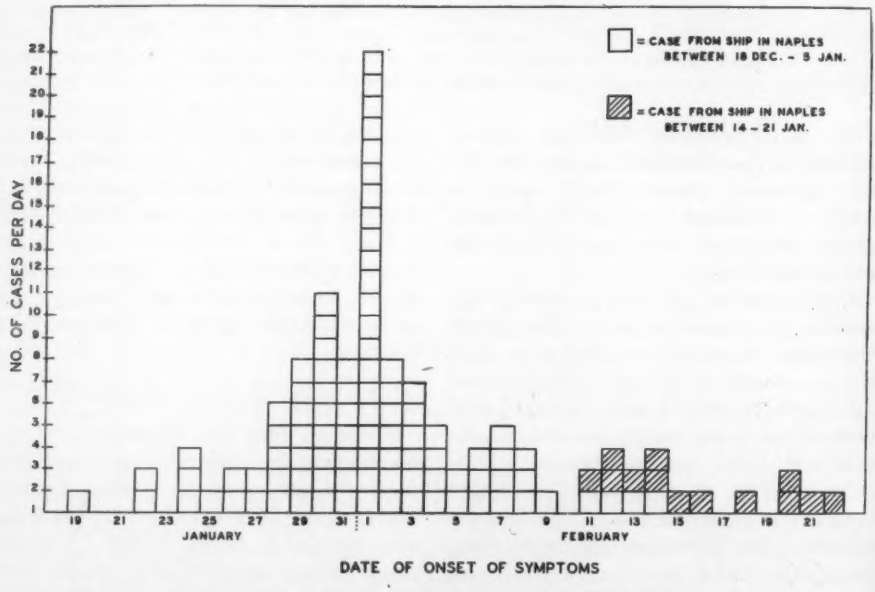
= CASE FROM SHIP IN NAPLES BETWEEN 18 DEC. – 5 JAN.
= CASE FROM SHIP IN NAPLES BETWEEN 14 – 21 JAN.
NO. OF CASES PER DAY
JANUARY
FEBRUARY
DATE OF ONSET OF SYMPTOMS

FIG. 2 HEPATITIS AMONG 6TH FLEET PERSONNEL, JAN. AND FEB. 1959. DATE OF ONSET OF SYMPTOMS (108 INTERVIEWED PATIENTS)

FIG. 2. Occurrence of hepatitis among personnel of the Sixth Fleet, U. S. Navy (January and February 1959) by date of onset of symptoms as given by 108 patients at the time of interview.

as the incubation period of infectious hepatitis and counting back from the beginning and termination of the first wave it was suggested that the most likely period of infection for this group was around the end of December or the beginning of January. Using an average incubation period of 33 days (see below) and counting back from the median of the wave gave a similar result. All nine ships concerned were in Naples together for 13 to 18 days between 18 December and 5 January. Applying the same methods to the second wave implicated the period between 13 and 22 January as the time of exposure. All five of the ships reporting cases were in Naples for three or more days between 14 and 21 January. A study of movements of the involved ships in each wave failed to reveal any other port calls in common during the December-January period. The sources of reported hepatitis cases among shore-based personnel during late 1958 and the peak incidence for this group in February (Figure 1) failed to reveal any concentrated focus of cases in ports visited by these ships. Since it appeared that the source of infection was associated with the Port of Naples information concerning the current and recent experience of other groups in the Naples area was obtained.

Hepatitis in Naples. Although the adequacy of reporting is unknown, figures supplied by the local health officials failed to reveal an unusual incidence of hepatitis among the native civilian population of Naples during the period under consideration or the months immediately preceding it. Age-specific morbidity data were not available but the officials stated that almost all of the *reported* cases occur in older children. Such a distribution has been suggested as being indicative of a population in which the vast majority of adults are highly immune and in which hepatitis is essentially endemic among very young children in whom the incidence of icterus may be so low that the infection is unrecognized or misdiagnosed.[4]

The records of the U. S. Navy Station Hospital in Naples revealed no unusual occurrence of hepatitis among shore-based personnel in the Naples area prior to or during the January-February period. In addition, physicians at the U. S. Consulate in Naples had noted no more than the usual number of cases of hepatitis among American civilians in the area.

The failure to find other evidence of an increase in hepatitis in Naples indicated that the source of infection in the outbreak was in some way uniquely limited to the ships themselves or to their crews during periods of liberty ashore.

Epidemiological Investigation. An examination of the distribution of U. S. Naval vessels in Naples during the two periods under consideration (18 December-5 January and 14-21 January) revealed that all ships reporting hepatitis had been berthed in or had used the facilities of the Maritime Station area of the port (Figure 3). In each instance a few ships using this area failed to be involved but no ship berthed exclusively in other areas of the port reported cases of hepatitis. This suggested that the source or sources of infection were associated with the Maritime Station area.

Contaminated water or food were considered as possible common-source vehicles of infection. During both of the periods under consideration ships tied up at piers obtained their potable water from pier-side connections. Ships at buoys obtained water from local barges. The largest ship obtained water from three sources: (1) evaporation, (2) barges, and (3) a submerged hose to a pier-side connection. Since there is considerable sewage contamination of the harbor (Figure 3), the possibility of contamination of the potable water supplies by small breaks in the hose connections might be considered as a likely source of infection. The involvement of ships with different water supplies and the distribution of cases aboard individual ships did not support this hypothesis. In addition, regular laboratory tests of various water supplies failed to reveal significant bacterial contamination and

there were no outbreaks of enteric disease.

Foods served on all ships, both involved and uninvolved, were obtained from a common supply. All raw vegetables and fruits obtained locally were thoroughly washed with hypochlorite solution. Contamination of foods during preparation and/or serving would have necessitated the simultaneous involvement of a number of asymptomatic hepatitis carriers in order to account for the wide dispersion of cases in different mess units. Similarly, person to person spread on board ships could not adequately explain the distribution of cases among various work details and sleeping units. With the exception of one ship there was no evidence to suggest that any infections in this outbreak were secondary to a previous case or cases among ship personnel unless the primary cases were unrecognized.

Contaminated food or water supplies would also fail to account for the relative lack of cases among officers. Exposure to contaminated "sea-spray" during trips to and from shore might explain this distribution to some extent since officers travel in covered boats whereas the enlisted men are transported in open launches. However, such reasoning would fail to account for cases on ships tied up at the pier with gangplanks affording ready access to the shore. One is left, therefore, with the probability that the majority of the patients contracted their infections on an individual basis while on liberty in Naples.

Early interrogation of some of the patients by members of the U. S. Navy Preventive Medicine Unit #7 in Naples indicated that in addition to eating and drinking establishments frequented by enlisted naval personnel, a large number of the patients had partaken of sandwiches, donuts, and

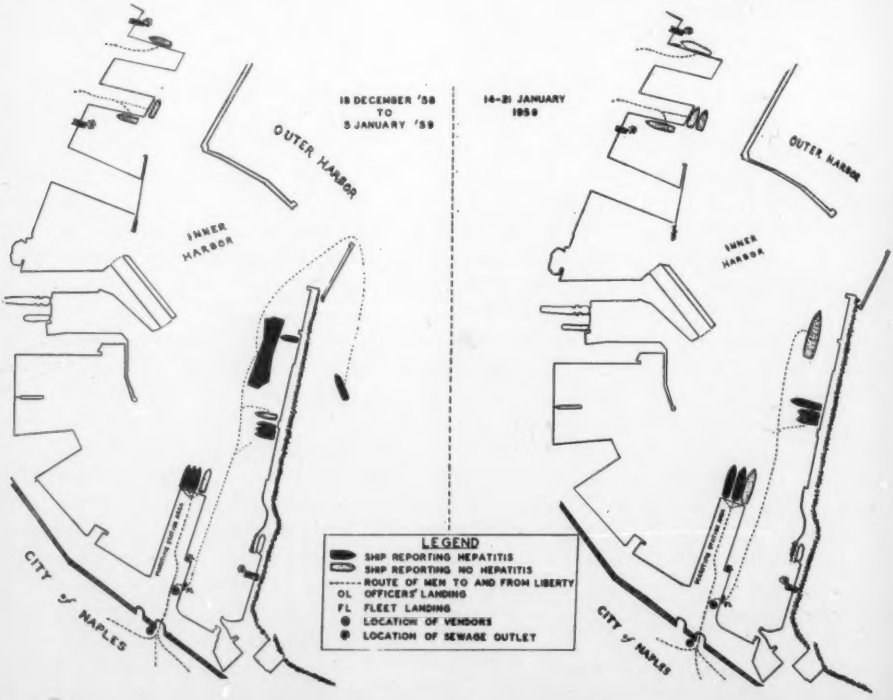

FIG. 3. Outline map of the Port of Naples showing the berthing positions of U. S. Navy ships, December 1958 and January 1959, and routes of access to shore for enlisted personnel on liberty.

TABLE 1

COMPARISON OF EATING EXPERIENCES OF PATIENT AND CONTROL GROUPS DURING PERIODS OF LIBERTY ASHORE IN NAPLES, DECEMBER 1958–JANUARY 1959

Group Interviewed	*Period in Naples*	*Total cases hepatitis*	*Total persons at risk*	*Case Rate per 1000 at risk*	*Persons Interviewed*		*Responses regarding eating experiences in Naples**											
							V+		O+		V+ O+		V+ O−		V− O+		V− O−	
					No.	% of group	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%
Patients	18 Dec.–5 Jan.	140	6,854	20.5	95	67.9	79	83	78	82	68	72	12	13	11	12	5	5
Patients	14–21 Jan.	16	3,912	4.1	13	81.3	11	85	9	69	6	46	4	31	2	15	0	0
Total Patients	either of above	156	10,766	14.5	108	69.2	90	83	87	81	74	69	16	15	13	12	5	5
"Controls"	14–21 Jan.	0	622	—	160	25.7	46	29	67	42	22	14	26	16	45	28	67	43

* V = vendors at Maritime Station Area
O = Other food sources (one or more of 15 establishments)
+ = history of food intake from indicated source
− = no food intake from indicated source

soft drinks dispensed by vendors at the entrance to the fleet landing pier (Figure 3). This finding led, in later questioning of 108 patients, to the inclusion of this as well as other sources of food and drink. It should be pointed out that the interviewing was carried out on 28 February and 1 March, six to eight weeks after the event. Many of the patients readily admitted that after shore leave they were frequently unable to remember their activities in detail. On the other hand, equally as many were able to relate their experiences and food intake in considerable detail.

Since it was impossible, at the time of the investigation, to interview uninfected persons on each of the involved ships, as a control group 160 enlisted men were selected at random from one ship which had been in Naples during the period of 14-21 January. One case of hepatitis occurred on this ship one week prior to the interviews. All personnel received gamma globulin at this time and no further cases were reported. Although the limitations of this group as controls is readily acknowledged it was the only such group available for comparison.

The replies of two patient groups and the control group concerning their eating experiences in Naples are presented in summary form in Table 1. For the purpose of simplification more than fifteen assorted clubs and restaurants are recorded collectively as "other" since no single establishment was patronized by more than half the members of any group. The most popular of these food service establishments, a club operated by and for enlisted men of the U. S. Navy, did not appear to be a likely source of infection since there was no unusual concurrent incidence of hepatitis among shore-based personnel who heavily patronize this facility. The second most popular establishment could account for no more than 25 per cent of the infections and the other thirteen establishments which were recalled by name could account for less than ten per cent each. All clubs and restaurants combined could account for 82 per cent of the cases in the first wave and only 69 per cent of those in the second if it is assumed that all such places were possible sources of infection. In contrast, both the first and second groups of patients (83 and 85 per cent respectively) heavily patronized the fleet landing vendors. The differences between the eating experiences of the two patient groups are not significant ($p = >0.1$ for each category). Only five of the patients denied eating any food other than that served on their ships.

A comparison of the control group with either of the patient groups or with both patient groups combined indicates that the controls, as a group, were far more conservative (or far less adventurous) than the patients were in their eating experiences in Naples. The differences in the "V+" and "V−O−" categories (i.e., those who ate foods purchased from the vendors and those who ate no foods purchased ashore) are highly significant ($p = <0.01$). The differences in the "O+" replies, i.e., foods purchased from sources ashore other than the vendors, are equally as significant when the controls are compared with the total patient group, but are not significant when they are compared with the group of patients who were in Naples at the same time ($p = 0.1$). The comparison between patients and controls suggests, therefore, that there were two major differences in their eating experiences: (1) the degree of patronage of the fleet landing vendors (83 per cent of patients *vs.* 28 per cent of controls), and (2) the degree of abstinence from all locally prepared foods (5 per cent of patients *vs.* 43 per cent of controls).

Discussion

As is often the case in investigations of outbreaks of infectious hepatitis, no single source of infection could be incriminated beyond doubt as being responsible for all the infections observed. In a situation such as the one under consideration in this report it is perhaps expecting too much to try to implicate a single source since there were undoubtedly multiple possible sources in the environment at the time of exposure. However, the findings of the investigation leave little or no doubt that the infections were acquired in the Port of Naples and that the source of infection for the vast majority of cases must have been in some way uniquely associated with the Maritime Station Area and, in particular, the fleet landing area. If the replies to the questionnaires are considered to be reliable, however, one must assume that 18 of the patients (17%) acquired their infections elsewhere in Naples. On the other hand, several findings lend strong support, either directly or indirectly, to the theory that the food vendors in the fleet landing area provided the most likely source of infection.

A large number of the patients volunteered the information that they always avoided salads or other raw foods in local restaurants, yet many of the same ones readily admitted eating the vendor-prepared sandwiches which consisted of sliced cold sausage, cheese or partially cooked ground meat garnished with lettuce, tomatoes, onions, etc. As far as the patients were aware these were the only "raw" foods they had eaten ashore. Four of the patients were restricted to their ships for disciplinary or other reasons during their entire time in Naples. Three of these (including the single case among officers) had sandwiches brought to them on one or more occasions by men returning from liberty late at night.

The location of the vendors provided ready access to their wares for all enlisted men returning from liberty each night, particularly for those who were waiting for launches to take them to their ships. Officers, on the other hand, departed from a landing quite remote from the vendors and were likely to be driven to that point (Figure 3). This factor could readily explain the almost total lack of hepatitis among officers. The location of the vendors could also explain the lack of hepatitis among shore-based personnel in Naples at the same time since these individuals were unlikely to be in the fleet landing area during the late evening hours when the vendors arrived. Of the two cases of hepatitis which did occur among land-based personnel during this period one, a Marine not included in the interviews tabulated, had stopped at the fleet landing for a sandwich while on duty as a truck driver on New Year's Eve. This was the only local food source he could incriminate.

After suspicion had been directed toward the vendors as possible disseminators of infection an investigation was undertaken by the local health authorities. Although the

exact nature and extent of the investigations are uncertain, there was no evidence of current or recent hepatitis in the vendors or members of their households. However, the vendors were restricted temporarily from conducting their business in the vicinity of the fleet landing. It is doubtful that this measure had any effect on the subsequent incidence of hepatitis among U. S. Naval personnel since the rates had already fallen to pre-epidemic levels by the time this action was taken.

Incubation Period

There were 21 patients who, because of almost total restriction to their ships or because of associations with other events, could give fairly accurate dates of exposure. Probable dates of infection for the group ranged from 24 December to 4 January and the dates of onset of symptoms ranged from 17 January to 7 February. The spread of possible incubation periods for this group was from 21 to 43 days, the mean and median both being 33 days. The period from onset of symptoms to onset of icterus ranged from one day to ten days, the mean being 3.5 days. The average incubation period to onset of jaundice was, therefore, 36.5 days.

Secondary Cases

No clear-cut evidence was obtained to indicate that secondary cases occurred aboard the involved ships. The mass administration of pooled human gamma globulin (approximately 0.01 ml per pound body weight) to all personnel on most of these ships may have been an effective measure in preventing such cases, but this is difficult to evaluate since it was given, in most instances, after the peak of the epidemic had passed.

Summary

During the months of January and February 1959 there was an unusual occurrence of hepatitis among the personnel of several ships of the Sixth (Mediterranean) Fleet of the U. S. Navy. The epidemic consisted of 156 cases (155 in enlisted men and one officer) occurring in two waves, each of which was characterized by the fact that the involved ships had been berthed in the same area of the Port of Naples approximately one month prior to the median of each wave.

Clinical and epidemiological information suggested that the illness was infectious rather than serum hepatitis and that in the majority of cases the most likely source of infection had been foods purchased from pier-side vendors. Calculations suggested a relatively long incubation period (average of 33 days). The illness tended to be mild or only moderately severe except for one relapse and one death.

Gamma globulin was administered in most instances after the peak of the epidemic had passed so that it was impossible to evaluate its effectiveness in preventing secondary cases.

Acknowledgments

Sincere appreciation is expressed to the following individuals and organizations for their generous assistance and friendly cooperation, without which this investigation would have been impossible:

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CASES OF SPECIFIED NOTIFIABLE DISEASES: U.S.

(Taken from *Morbidity and Mortality Report,* USPHS, Nov. 17. 1961)

First 45 weeks	1961	1960
Anthrax	6	17
Brucellosis	511	678
Diphtheria	498	648
Hepatitis	64,032	33,748
Malaria	55	63
Measles	397,136	410,828
Polio (Paralytic)	772	2,053
Rabies (in man)	3	2
Rabies (in animals)	2,989	3,031
Strep. Sore Throat (incl. Scarlet Fever)	274,007	264,282
Typhoid Fever	716	734

A Small Reference Library in Pediatrics

By

MAJOR EDWARD J. TOMSOVIC, MC, *U. S. Army**

A QUESTION was raised as to which books on pediatric subjects ought to be available to a physician practicing in a relatively remote place. Specifically, the situation concerned medical officers of the armed services in overseas or isolated areas. In many instances these officers must assume responsibility for child care in their communities even though their training in pediatrics is very limited. Further limitations are imposed because the diagnostic and therapeutic resources of the small hospital or dispensary must be kept simple. Many difficult problems which arise and particularly those of a chronic nature can be solved by evacuating the patient to a larger medical center or referring him to a consultant whose prescribed regimen can then be carried out by the local physician.

There remain many situations where the doctor at the small post must act speedily or make an important decision himself. Acute infections, poisonings, trauma demand rapid diagnosis and treatment. Upon the differential diagnosis between two chronic disorders may rest the decision whether a child can safely be managed at the local level or must be evacuated with his family. A host of less threatening but puzzling conditions present themselves which call for proper handling as well as suitable explanation and reassurance for parents. The physician in this situation may also do considerable well child care, operate a newborn nursery and a pediatric ward.

His library must serve as his immediate resource for consultation and support. Assume that this library already has a modest assortment of standard references in the basic sciences and other clinical specialties. Which books in the field of pediatrics will serve him best? The list should be limited to the bare minimum because of such considerations as space, weight, and cost. Ideally, each book should be authoritative, complete, and current.

One further consideration—the physician may be preparing himself for a career in pediatrics. His library must also serve for these studies.

Given below is one list of books compiled to meet this requirement for a small reference library in pediatrics. It is divided into two parts; first, those books primarily helpful in diagnosis and treatment; second, books providing useful information for background and better patient management. An attempt has been made to arrange them in order of descending importance.

The total cost of this library is $303.00. It occupies 1.19 cubic feet or 2.55 linear feet of shelf space and weighs 70 pounds and 3 ounces.

Each year should see some changes in any such library as new editions of standard works appear or better books replace current choices. It is understood that this list is the author's present selection offered without apology. It is his responsibility alone and in no way constitutes an official recommendation of the United States Army.

Others may find fault with this small library. They can with justice point to one or another significant omission. Or perhaps they would choose to substitute another author on a particular subject for the one given here. "De gustibus non disputandum est."

* Chief, Pediatric Service, Walter Reed General Hospital, Walter Reed Army Medical Center, Washington 12, D.C.

(Tabulation of books is given on the next page)

TABLE 1

Title	Author	Publisher	Edition	Year	Price
Textbook of Pediatrics	Nelson, W.	Saunders	7th	1959	$16.50
Handbook of Pediatric Medical Emergencies	DeSanctis, A.	Mosby	2nd	1956	6.25
Practical Fluid Therapy in Pediatrics	Hill	Saunders	1st	1954	6.00
Diseases of the Newborn	Schaffer, A.	Saunders	1st	1960	20.00
Erythroblastosis Fetalis	Allen	Little-Brown	1st	1958	4.00
The Surgery of Infancy and Childhood	Gross, R.	Saunders	1st	1953	16.00
Infectious Diseases of Children	Krugman, S.	Mosby	2nd	1960	13.00
Report of Committee on Control of Infectious Diseases	A.A.P.	—	13th	1961	1.00
Accidental Poisoning in Childhood	A.A.P.	Thomas	1st	1956	3.00
Pediatric X-ray Diagnosis	Caffey, J.	Yearbook	4th	1961	32.00
Pediatric Cardiology	Nadas, A.	Saunders	1st	1957	12.00
Diseases of the Nervous System in Infancy, Childhood & Adolescence	Ford, F.	Thomas	4th	1960	29.50
Blood Diseases of Infancy and Childhood	Smith, C.	Mosby	1st	1960	17.00
Clinical Management of Behavior Disorders in Children	Bakwin, H.	Saunders	2nd	1960	11.00
Allergy in Childhood	Glaser, J.	Thomas	1st	1956	12.50
Practical Pediatric Dermatology	Leider, M.	Mosby	1st	1956	10.50
Diagnosis and Treatment of Endocrine Disorders in Childhood & Adolescence	Wilkins, L.	Thomas	2nd	1957	17.50
Pediatric Gynecology	Schauffler, G.	Yearbook	4th	1958	9.00
*Disease of Children in the Subtropics and Tropics	Trowell, H.	Williams & Wilkins	1st	1958	18.50
Primarily for Background and Management					
Growth & Development of Children	Watson, E.	Yearbook	3rd	1959	7.75
Pathology of the Fetus & Newborn	Potter, E.	Yearbook	1st	1952	19.00
Resuscitation of the Newborn Infant	Abramson, H.	Mosby	1st	1960	10.00
Counselling in Medical Genetics	Reed, S.	Saunders	1st	1955	4.00
Health Supervision of Young Children	USPHA	Chicago Medical Book Company	1st	1955	3.00
Hospital Care of Newborn Infants	A.A.P.	—		1960	1.50
Care of Children in Hospitals	A.A.P.	—		1960	1.50
Adoption of Children	A.A.P.	—		1959	1.00

* Only if appropriate to the area under consideration.

Retroperitoneal Hemangioma—A Case Report

By

COLONEL W. A. TODD, JR., MC, *U. S. Army*; CAPTAIN CHARLES H. BAUGHMAN, MC, *U. S. Army*; AND CAPTAIN JOHN C. SANDEFUR, MC, *U. S. Army*

RETROPERITONEAL hemangiomas of extrarenal origin are rarely encountered in surgical practice. Only three cases are reported in the American literature. It then seems worthy to report a case of retroperitoneal cavernous hemangioma and review the previously reported cases.

CASE REPORT

The patient, a 23 year old Caucasian male, was admitted to Madigan General Hospital 7 October 1959. Ten days prior to admission, enroute from Korea by ship, steady sharp pain began in the left thigh, left inguinal region and left lower abdomen associated with an oral temperature of 102 degrees F and intermittent vomiting. Therapy consisted of 5 days of bed rest and intramuscular penicillin.

The past history, family history and review of systems were non-contributory.

Physical examination on admission revealed: temperature 97.4 orally, pulse 80, respirations 20/minute, and blood pressure 122/80. The tongue and skin were dry. The chest, lungs and heart were normal to physical examination while the abdomen was slightly distended, soft in the upper quadrants, but tender in the lower quadrants, maximal in the suprapubic area. Bowel sounds were hyperactive. Rectal examination revealed a large tender mass in the pelvis. There were dilated, engorged veins over the anterior aspect of the upper left thigh and the left lower abdomen. No lymphadenopathy was noted.

The laboratory studies were: hemoglobin 12.2 gm., hematocrit 40%, white cell count 19,350: 67% neutrophils, 31 lymphocytes, and 2% monocytes. The urinalysis and chest x-ray were within normal limits. Multiple abdominal films suggested an early paralytic ileus.

The working diagnosis was acute appendicitis with perforation and secondary pelvic abscess. Incision and drainage was planned under spinal anesthesia four hours after admission. In the Buie position, the pelvic mass was not palpable and sigmoidoscopy was normal. The mass reappeared in the supine position. Surgery was delayed for further diagnostic studies.

The day following admission, intravenous pyelogram revealed a non-functioning right kidney, and a large defect in the right side of the bladder. The earlier finding of ileus had progressed. A severe allergic urticarial reaction, presumably due to penicillin, required the use of steroids.

Two days after admission, fever, increased lower abdominal pain, severe tenderness and rebound tenderness in the lower abdomen prompted surgical exploration. The appendix was normal. A large retroperitoneal tumor was present, extending from the pelvis to the right kidney, pressing against the bladder involving the mesentery of the ileum, and closely associated with vessels of the cecum. The right colon was mobilized to visualize the tumor, which consisted of a serpiginous mass of veins with numerous thromboses lying in a fibrous network. The right ureter was obstructed by the tumor. The portion of the tumor lying in the general area of the right colic gutter was excised, thereby relieving the obstruction of the right ureter. Because of intimate association of tumor with vessels of the mesentery, the blood supply to the terminal ileum and cecum was compromised, requiring resection with end-to-end ileocolostomy.

Postoperatively, a psychosis due to Cortisone occurred. On the eleventh postoperative day, re-exploration revealed leakage at the anastomosis with obstruction. The anas-

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Madigan Gen. Hosp.

FIG. 1. Splenoportogram showing numerous large varicosities.

tomosis was exteriorized, and later opened as an ileostomy. Fifty-six days after the second surgery, gastrointestinal continuity was restored. Intravenous pyelogram revealed return of good function to the right kidney.

On return from a thirty-day convalescent leave, mild edema of the left leg was noted, which responded rapidly to bed rest and elastic stocking support. A diagnosis of abdominal varicosities, secondary to portal hypertension, was ruled out by normal liver function studies, an esophagogram and an upper gastrointestinal series plus a splenoportogram which revealed a normal portal vein with marked "variosities" (tumor) visualized in the left upper abdomen.

The patient was discharged to duty with an infantry unit 146 days after admission.

Final pathologic diagnosis by Major Paul W. Palmer, MC, Pathologist, was: Cavernous hemangioma, retroperitoneal.

DISCUSSION

The previously reported cases of retroperitoneal hemangioma were all successfully removed surgically. Harris[1] and Millman[2] each reported cases of retroperitoneal hemangioma. Newman and White[3] reported the most recent case of retroperitoneal capillary hemangioma, which was in proximity to the lateral border of the left kidney. The preoperative differential diagnosis included renal cyst, retroperitoneal tumor, kidney tumor, and mesenteric cyst. Newman and White also mention a fourth case, reported by Hilse,[4] who reported a capillary hemangioma in a recurrent retroperitoneal lipoma.

Two recent studies of primary retroperitoneal tumors failed to mention hemangioma.[5,6]

Hemangiomas may be of the cavernous or the capillary type. The cavernous hemangioma is manifested by widely dilated anastomotic vascular channels with thin connective tissue septa. In early cases, simple spherical sacculations and tubular dilatations, all connected with one main afferent and one efferent vessel, may be found. These tumors grow by distention of original vessels, and by the formation of new vessels. Free anastomosis with other arteries and veins may occur (Ewing[7]).

The histogenesis of the cavernous hemangioma is obscure. Development from veins by simple saccular and tubular dilatation has been described. Others stress fibrocellular growth about the walls of capillaries, followed by retraction and dilatation from mechanical pressure. In the case of retroperitoneal hemangomia as we are reporting, complete surgical excision of the tumor was impossible. The acute pain and abdominal findings were due apparently to thrombosis in the tumor. A diagnosis of abdominal varicose veins, secondary to portal hypertension, as described by Rousselot and others,[8] was considered, but ruled out by appropriate studies. Satisfactory recovery of the patient was achieved.

SUMMARY

A case report is presented of a retroperitoneal cavernous hemangioma in a 23-year-old Caucasian soldier. A review of three previously reported cases is given. A synopsis of the pathology and histogenesis of cavernous hemangioma is made.

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GIVE GIFTS—NOT PRESENTS!

Ralph Waldo Emerson once said "the only gift is a portion of thyself." This is a good season to remember that dictum. Unless a gift embodies an earnest desire to please and thoughtful consideration of the taste and wishes of the recipient it is not a gift at all—it is only a present. And presents can be given without giving "any portion of thyself." Sometimes, even their selection is left to somebody else. Often they represent little more than burdensome obligations, wrapped in ribbon.

Presents can be nice to receive, but only *gifts* warm the heart. The best kind of all need no fancy wrappings and they are given without regard to the calendar. They are invisible gifts, the kind we seldom think about.

One of these is the gift of *confidence.* Everyone, if the truth were to leak out, has his periods of self-doubts, his lonely hours of wondering whether he really *does* have what it takes. Did you ever stop to realize how much of the personal confidence we have in ourselves is born out of the confidence other people have in us? It is a contagious arrangement. If *others* think we can, perhaps we *can.* What priceless gifts such people give! They make us feel more important, more attractive, more capable! They prop us up in all our leaning places. Under the sunshine of *their* confidence *our* doubts melt.

But a person has to be rich to give *such* gifts—not in money, in character. ROBINS READER. Vol. 4, No. 4

Massive Rectal Bleeding: A Late Complication of Appendectomy

By

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and

H. E. KARBACH, JR., M.D.†

INTRODUCTION

THE operative management of acute appendicitis has been dealt with at length in the surgical literature during the first part of the twentieth century. The management of the appendiceal stump has been the center of much of these controversial writings. The preferred method of handling the stump continues to divide surgeons both young and old. Three principal technics of disposing of the stump have emerged, namely: (a) simple ligation or the "tie and drop method"; (b) ligation and inversion of the stump and (c) inversion without ligation. The ever increasing number of surgeons employing inversion without ligation has prompted us to report an unusual complication of massive rectal bleeding following this method.

CASE HISTORY

Sgt. L. A. B., age 30, Case No. 638928 was admitted to the U. S. Naval Hospital at Camp Pendleton on July 2, 1959 with rectal bleeding of three days' duration. Three weeks prior to admission he experienced a constant dull pain in the midline of his lower abdomen which was unaffected by position, diet or bowel habit. He received no treatment at this time but noted that his bowel movements were more frequent though no diarrhea was present. Three days prior to admission he suddenly began to pass bright red blood per rectum which persisted and he reported for sick call at his dispensary. Because of the amount of bleeding present he was transferred to the hospital. On the day of admission he had passed out twice while having a bowel movement. He denied any history of previous gastrointestinal complaints. There was no nausea or vomiting. He had sustained a five pound weight loss in the past three months. There had been a decrease in his appetite for the last four weeks. The patient had been in the Marine Corps since 1946, was a moderate drinker and smoked one and one-half packages of cigarettes per day. His family history was not significant.

Past History: In 1953 he had an appendectomy with an uneventful convalescence. Tonsillectomy, age 7. In 1954 he sustained a back injury while parachuting; X-rays of his lumbar spine and sacro-iliac area were negative and this was treated conservatively. In 1952 he had urethritis which responded well to treatment with Sulfa.

Physical Examination: B. P. 100/50, Pulse 104 and weak. Temperature 99.6 degrees F. Weight 160. The patient was cooperative, well-oriented but pale and very apprehensive; a unit of blood was being administered on admission. The conjunctiva were pale as was his tongue. The skin was dry with poor turgor. The lungs and heart were normal to auscultation and percussion. There was an eight centimeter in length, well-healed scar in the right lower quadrant of the abdomen; there was generalized abdominal distention but there were no areas of tenderness or palpable masses. The liver, spleen and kidneys were not palpable. The bowel sounds were hyperactive; the hernial orifices were negative. On rectal examination the sphincter tone was good and bright red blood was present on the examining finger; the prostate was not enlarged.

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Laboratory Data: Urinalysis—specific gravity 1.035, reaction 6.0, color clear, both albumin and sugar were negative; 8-10 pus cells/hpf. Bleeding time one minute and thirty seconds; coagulation time 3 minutes and five seconds. Initial hemoglobin 8 grams, hematocrit 23%; WBC 17,800 with 74 segs, and 26 lymphocytes. Admitting chest x-ray was negative.

Hospital Course: On admission to the emergency room, he was immediately typed and cross matched for six units of blood; hemoglobin and hematocrit determinations were ordered every four hours. Despite the administration of six units of blood in the initial eight hours of his hospitalizationt his hemoglobin was only 9.5 grams and his hematocrit 28%, and he continued to pass large amounts of blood per rectum. In an attempt to determine the source of the bleeding sigmoidoscopy was performed: there were no hemorrhoids, fissure or neoplasm up to the 15 cm. level at which point the large amount of blood present made visualization impossible. BSP at this time was 11.5% in 30 minutes. Because of the inability of these measures to bring him to a euvolemic state it was decided to explore the patient. Under endotracheal anesthesia a long paramedian incision was employed. Upon exploration no blood was found in the stomach, duodenum or small bowel down to the level of the ileocecal valve. The entire colon, however, contained a large amount of blood. Palpation of the entire colon revealed only a firm mass, 1×2 cm. in the cecum, well circumscribed, moveable and approximately in the area of the old appendiceal lumen. No area of colitis, neoplasm, polyps or diverticulitis could be found. A cecotomy was then performed and a large amount of blood was evacuated; a fragile mass was present in the most inferior portion of the cecum which was red, papillary and in the area of the appendiceal orifice (figure 1). This mass was bleeding briskly. The decision was made to resect the cecum and ascending colon because: (a) the mass was in close proximity to the ileocecal valve and (b) the surrounding edema and inflammation. Hence the cecum, 8 centimeters of the terminal ileum was resected with an end to end anastomosis. The rent in the mesentery was obliterated and the abdominal wall closed in anatomical layers.

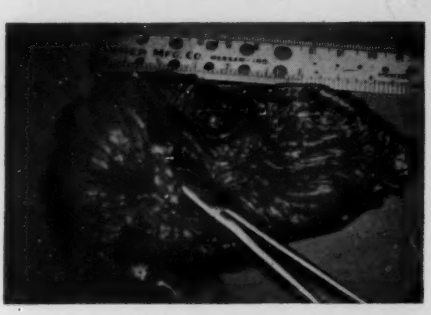

FIG. 1. Hemostat is placed through ileocecal valve into Terminal ileum. Note friable, red papillary nodule superior to valve which is the inverted appendiceal stump and the source of the rectal bleeding.

Pathological Report: Specimen consists of a portion of cecum with terminal portion of ileum and including a small nodule on the serosal surface which shows congestion and some hardening and thickening and which shows on the mucosal surface a diverticulumlike extension of the mucosa. This apparently represents the original appendiceal stump and grossly appears to be inflamed. The specimen altogether measures about $9 \times 7 \times 3$ centimeters. The small nodule measures about $2 \times 2 \times 1.5$ centimeters.

Microscopic Examination: Sections show a rather poorly fixed specimen of bowel including normal appearing mucosa undergoing autolytic degeneration. The underlying muscle wall is consistent with that of the appendix, including some lymphoid tissue, just under the mucosa. There is a moderate diffuse infiltration throughout the wall with both acute and chronic inflammatory cells. The inflammatory reaction is nonspecific in character. There is no evidence of any neoplasm and the lesion is interpreted as nonspecific active inflammation in appendiceal stump. In addition to the inflammation there are in some areas large collections of hemosiderin filled macrophages and evidence of fibroblastic proliferation, indicating considerable previous hemorrhage in these tissues,

TABLE 1

LABORATORY REPORTS ON BLOOD

Date	*Hour*	*Hb:*	*Hct:*	*K*	*Cl.*	*Ca*	*Na*	*BSP*	*B.P.*	*Pulse*
7-3-59	1300	9.5 gms.	24.0%						100/54	104
	1700	9.5	28						90/60	128
7-4-59	0700	9.5	28						90/40	140
	0800	9.5	28					11.5%	80/0	130
	1600	12.0	37							
7-5-59		11.5	34							
7-6-59		14.0	35							
7-8-59				5.0 meq.	109.5 meq.	9.0 meq.	146 meq.			

probably in association with the inflammation.

Diagnosis: Nonspecific inflammation in appendiceal stump. (CGB, USN)

Post-Operative Course: This patient had an uneventful convalescence. There was no additional evidence of gastrointestinal bleeding. Wound healing was good and subsequent barium enema demonstrated a functioning ileocolostomy. His peripheral blood returned to normal before being discharged Aug. 28, 1959.

DISCUSSION

Inversion without ligation, according to operative reports in our hospitals has increased from being employed 15.8% in 1959 as compared with only 4% in 1946.[1] Because of the increased incidence of the employment of this technique, we are alerted to the possibility of this being a source of gastrointestinal bleeding more often in the coming years. Kronlein in 1884 initially employed simple ligation. Treves in 1889 covered the appendiceal stump with three Lembert sutures to remove the contaminated cut end from the peritoneal cavity. Sem first described inversion of the stump in 1889[2] and Dawborn in 1895 suggested and employed inversion without ligation to obtain a good peritoneal seal;[3] Ochsner in 1939 repopularized this technique.[4] William Mayo was once quoted as saying "I have not had occasion to regret not having inverted the stump."[5]

Yeager observes that invagination may be: (a) into the lumen of the cecum, or (b) into the wall of the cecum forming a blind pouch. Experimentally he could not demonstrate one method of managing the stump to be superior to another.[2] Horsley of Richmond reports finding pus collected in the inverted stumps of these appendices.[6] Stevenson in 1947 reported massive rectal bleeding in a 24 year old pregnant female who had had an appendectomy twelve months before in which the stump was invaginated without ligation. A right hemicolectomy was performed to resect the bleeding point. He mentions that in inverting the stump it is removed from the peritoneal cavity and the raw surface is covered.

Seelig in advocating simple ligation points out the risk of intramural abscess formation following inversion of a ligated stump.[8] He further states that inversion without ligation introduces the possibility of spillage of bowel contents and bleeding from the unligated open stump.

A review of the pathological findings in this case reveal that approximately 2.0 centimeters of the appendiceal stump was inverted; this part of the appendix later underwent inflammatory changes with subsequent necrosis of the remaining appendix and hemorrhage as manifested by the hemosiderin filled macrophages in the appendiceal wall. Any technique employed in treating the stump is best used when the entire appendix is removed thereby avoiding any complication that may accrue from subtotal appendectomy.

Summary

A case of massive rectal bleeding from an appendiceal stump inverted without ligation has been reported. Treatment consisted of resection of the bleeding point followed by an uneventful recovery.

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Haemophilus Vaginalis: Incidence Among 431 Specimens Examined

By

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and Major Robert I. Bosman, MC, *U. S. Army*†

Introduction

Leopold[1] (1953) described an organism which he isolated in 16 (27%) of 58 vaginitis cases. He suggested that the organism had some of the characters of the genus Haemophilus and that it may be a cause of vaginitis in females and urethritis in females and males. He described it as a "Gram negative, non-motile, non-encapsulated, pleomorphic rod, 0.5 microns wide and from 0.5 to 2 microns long. It appears as a tiny pinpoint, colorless, definitely hemolytic colony on Casman's blood agar after 48 hours."

Gardner and Dukes[2] (1954) described a similar organism found in cases of nonspecific vaginitis. In a later paper,[3] (1955) they proposed the name of Haemophilus vaginalis. The organism was found in 141 (12%) of 1181 vaginal specimens from patients with signs of inflammation while they failed to isolate the organism from 78 "normal" control patients. These authors introduced the term "clue cells" which were defined as epithelial cells found in the vagina or male uretheral discharge showing many small Gram negative bacilli either intracellularly or attached to the surface. The clue cells were associated with H. vaginalis vaginitis in the majority of cases. There were relatively few lymphocytes in the vaginal discharges of their patients.

Deming[4] (1955) isolated an unstated number of similar organisms from patients with mild vaginitis. He called these bacteria Haemophilus influenzae but from his description it would seem likely that they were H. vaginalis.

Ray and Maughan[5] (1956) found the organism in 68 (44%) of 154 patients. Nineteen (27%) of the 68 cases were asymptomatic and diagnosis was based on the presence of clue cells alone.

Lutz, Wurch, and Grootten[6] (1956) cultured H. vaginalis from 20% of their patients with vaginal discharge in France. They found that growth was enhanced by the addition of glucose to a 10% defibrinated blood medium. In another paper these authors[7] (1956) reported that CO_2 did not favor growth, contrary to Gardner and Dukes.[3]

Brewer, Halpern, and Thomas[8] (1957) using Casman's[9] medium found 89 (42%) of 211 private patients with leukorrhea showed the organism in pure or nearly pure culture.

Gardner, Dampeer, and Dukes[10] (1957) used a modified Casman's agar with 5% rabbit blood to isolate H. vaginalis in 274 (12%) of 2251 private white patients. Applied only to those patients with a diagnosis of bacterial vaginitis the organism was found in 94% of the cases.

Doell[11] (1958) was unable to culture H. vaginalis from any of 300 female patients at Wuerzburg, Germany.

It is by no means agreed that H. vaginalis is the cause of any specific disorder in the female. Heltai and Taleghany[12] (1959) treated 30 patients carrying the organism and concluded that no relationship existed between vaginitis and the presence or absence of H. vaginalis.

Butler and Beakley[13] (1960) maintained that vaginitis is caused by the absence of Doederlein bacilli (Lactobacillus acidophilus).

The reader is referred to the work of Gardner and Dukes,[3] Amies and Jones[14]

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† Chief, Laboratory Service, 97th General Hospital.

(1957) and Edmunds[15] (1960) for biochemical and antibiogram studies. Dukes and Gardner[16] (1961) have reported on the various amino acid requirements, growth characteristics, and agglutination reactions with antisera produced in rabbits.

Methods

The following study of the incidence of H. vaginalis among female dependents of the U. S. Forces in Germany covers the period from March to December, 1960. It includes 431 vaginal and cervical cultures received from the obstetrical-gynecological clinics of the 97th General Hospital. It does not include specimens from Bartholin cysts, post-partum infections, lochia, nor fistulas. Case histories were not available but specimens were accompanied by request slips, most of which recorded the major disorder such as "discharge," "vaginal pruritus," "leukorrhea," or "cervicitis." No mention is made of Trichomonas vaginalis since wet mount examination for that organism is made at the clinics and not routinely in the laboratory.

The purpose of the study was to determine the incidence of H. vaginalis among patients exhibiting some degree of inflammatory vaginal syndrome.

Vaginal and cervical swabs were inoculated on 5% defibrinated sheep blood peptone agar, Eosin Methylene Blue agar, Sabouraud agar, fluid thioglycollate broth, and 5% defibrinated sheep blood chocolate (heated) agar. All plates were incubated at 37C in natural atmosphere except the chocolate plates which were placed in a candle jar to provide increased CO_2 tension at 37C. Concurrently slides were stained by Gram method and searched for clue cells. The presence of H. vaginalis was determined by growth characteristics, colony morphology, and cellular morphology of the organisms stained by the Gram method. While this may appear to be subjective it is the only criterion available since definitive biochemical and serological methods have not been developed. In all cases isolations came from the chocolate agar after 16-24 hours incubation. Blood agar supported fair growth but required 48 hours at normal atmosphere. Neither EMB nor Sabouraud agar support growth of H. vaginalis.

Results

Haemophilus vaginalis was isolated from 147 (34%) of 431 vaginal-cervical specimens from an equal number of female patients with gynecological complaints. A majority of the isolates, 125 (29%), were in pure or nearly pure culture. The presence of a few other colony types was not deemed sufficient to call the growth "mixed." Table I lists the cultural findings from the 431 specimens.

Discussion

No difficulty was encountered growing H. vaginalis on 5% defibrinated sheep blood chocolate agar under increased CO_2 tension. The organism develops pinpoint colonies,

Table I

Cultural Results of 431 Vaginal and Cervical Specimens

Organisms isolated	*Number*	*Percent*
H. vaginalis	125	29.0
H. vaginalis and streptococci	10	2.3
H. vaginalis and coliforms	7	1.6
H. vaginalis and yeasts	4	0.9
H. vaginalis and N. gonorrhoeae	1	0.2
Alpha and gamma streptococci	55	12.8
Escherichia sp.	51	11.8
Staphylococcus sp.	27	6.3
Yeasts	24	5.6
Hemolytic streptococci	19	4.4
Lactobacillus sp.	14	3.2
Proteus sp.	13	3.0
Aerobacter sp.	12	2.8
Coliforms and streptococci	6	1.4
Coliforms and staphylococci	5	1.2
Neisseria gonorrhoeae	5	1.2
Corynebacterium sp.	4	0.9
Mima polymorpha	3	0.7
Bacteroides group	2	0.5
Haemophilus influenzae	1	0.2
Pseudomonas aeruginosa	1	0.2
Negative	42	9.8
Total	431	100.0

usually in great numbers, difficult to see by direct light but easily seen by oblique light. Fluid thioglycollate broth supports good growth if inoculated with a pure strain but genital swabs usually have a few coliforms that rapidly overgrow H. vaginalis.

There was excellent correlation between findings of clue cells on smears and culture results. In a few incidences swabs yielded clue cells by Gram stain but were negative for H. vaginalis by culture.

Ethyl alcohol (95%) was found to be the preferred decolorizing agent for the Gram stain of clinical specimens. Many H. vaginalis organisms in the clue cells fail to decolorize completely with this agent but lactobacilli appear uniformly Gram positive. If a 4:1 alcohol-acetone mixture is used H. vaginalis will completely decolorize but many lactobacilli will also. Lactobacilli, while larger than H. vaginalis, can often be found packed in or on epithelial cells thus possibly causing confusion with genuine clue cells. Ethyl alcohol-decolorized H. vaginalis from culture media retain none of the Gram stain but usually appear to take the counter-stain unevenly.

Edmunds[15] mentions an attribute of these organisms to the effect that increased growth in a candle jar is due to the sealed jar and not to the CO_2 contained therein. Studies here were not able to confirm this. Ultimate growth is about the same in normal atmosphere or in CO_2 but is more rapid with increased CO_2.

Acknowledgment

Acknowledgment is gratefully given to SP-4 Ingeborg G. Butcher and SP-4 Loran R. McKinley, Jr. of the U. S. Army Hospital, Frankfurt, for their valuable assistance during this study.

Summary and Conclusions

Cultural studies of 431 vaginal and cervical specimens inoculated on routine laboratory media yielded 147 (34%) isolates of Haemophilus vaginalis from female dependents of military personnel in Germany. Defibrinated sheep blood chocolate agar incubated in CO_2 candle jar for 16-24 hours appeared to be an adequate medium for the isolation of these organisms. This study supports the suggestion of previous authors that H. vaginalis is a probable etiological agent in "nonspecific" vaginitis.

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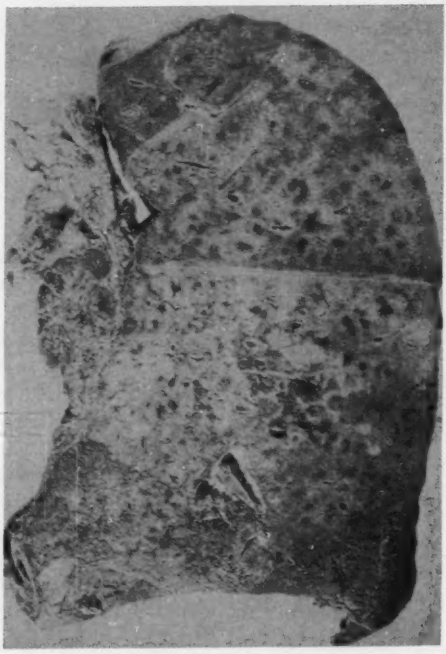
Case for Diagnosis

A THIRTY-EIGHT year old Negro male had been ill for 10 days with fever, right chest pain, and cough productive of rusty sputum. Clinical and x-ray signs of consolidation of the entire right lung were present, and white blood cell count was 38,000. The patient died on the 12th day. The photograph is of the sectioned surface of the formalin-fixed right lung.

From the Medical Museum and Medical Illustration Service of the Armed Forces Institute of Pathology, Colonel Frank M. Townsend, USAF, MC, The Director. Diagnosis is given on page 939.



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EDITORIAL

Our Constitution and By-Laws

THE Association of Military Surgeons of the United States, organized in 1891, like many other such bodies had a modest beginning. The far-sighted founder of the Association, Nicholas Senn, prominent physician and surgeon, Surgeon General of the National Guard of Wisconsin and of Illinois, was convinced that medical men both in and out of the regular military establishments should convene regularly to discuss the military medical needs and accomplishments in our country.

Those were days before the X-ray, before diphtheria antitoxin, and before typhoid vaccine.

In 1903 the Association was reorganized and incorporated by Act of Congress.

From this meager growth we have advanced. Our members have seen service in a number of wars. Our official journal, MILITARY MEDICINE (formerly THE MILITARY SURGEON), has recorded many of the experiences of medical men of those days.

Any Constitution and By-Laws adopted in those days could foresee a life of many years, if conditions did not change. But change is a part of life, and America has participated in the changes of the world. So with our Association. We would not want it otherwise.

Since World War II, changes in all phases of life have come upon us at a phenomenal rate. These have affected business organizations, professions, governments, and our own individual households.

Our Association has taken advantage of newer methods; we have installed modern office equipment to speed up our service to members.

In one respect, however, we have lagged. Many of us have recognized this. Such lagging has been due to the operation of the Association under the present Constitution and By-Laws which has been outgrown, outdated, in this rapidly moving sphere of activity.

The Executive Council, our governing body, has authorized a study of this situation with a view toward a complete revision of our Constitution and By-Laws. Our members are urged to participate in this study by sending in suggestions as soon as possible. For those who desire to participate, it might be helpful to have a copy of the Constitution and By-Laws of our Association. Copies are available for the asking. We encourage your suggestions. They must be made promptly so the proposed revisions can be published. Action can then be taken at the 69th Annual Meeting of the Association in November 1962.

We want to produce a document that will guide us for many years to come. We need your help.

SUSTAINING MEMBERS

It is a privilege to list the firms who have joined The Association of Military Surgeons as Sustaining Members. We gratefully acknowledge their support.

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The Sir Henry Wellcome Medal and Prize

COMPETITION FOR 1962

THE AWARD consists of a medal, a scroll, and a cash prize of $500 to be presented during the Annual Meeting of the Association of Military Surgeons of the United States, November 12, 13 and 14, 1962.

The competition is open to all medical department officers, former such officers, of the Army, Navy, Air Force, Public Health Service, Veterans Administration, The National Guard and the Reserves of the United States, and commissioned officers of foreign military medical services. No person shall be eligible for a second award and no paper previously published will be accepted.

Six copies of an essay (3,000-10,000 words) which reports some original work in the field of military medicine must be submitted to the Secretary of the Association and must bear a postmark no later than 15 June 1962. Manuscripts must be double spaced. The true name of the author must not appear on the manuscript. A *nom de plume* or symbol must be used. A sealed envelope bearing the *nom de plume* or symbol on the outside and an enclosed paper giving the true name and address of the author and *nom de plume* must accompany the essay.

Federal Nursing Service Award—1962

THE AWARD consists of an honorarium of $500 and a scroll which will be presented during the Annual Meeting of the Association of Military Surgeons of the United States.

Any nurse in the Federal Nursing Services is eligible providing she submits an essay (3,000-10,000 words) which reports on the most beneficial study of or contribution to professional nursing in any area of practice. The subject material of the essay may be the result of the study or actual experience or a combination of both.

Essays must be submitted in six copies, double spaced, on standard size paper with the name of the author omitted, but a *nom de plume* substituted. An accompanying sealed envelope with the title of the essay and the *nom de plume* on the outside and a paper on the inside bearing the true name and address of the author and *nom de plume* must accompany the essay.

The manuscripts must be mailed to the Secretary of the Association and bear a postmark no later than 15 June 1962.

Around the World

(Ser. IV, No. 12)

By
CLAUDIUS F. MAYER, M.D.

LUXEMBURG has its own society for the Red Cross. Recently, the society inherited a substantial sum from a citizen who appointed as his sole heirs the Cancer Prevention League, which is a part of the *Red Cross in Luxemburg,* and the Tuberculosis Prevention League. The Red Cross in this tiny country is paying special attention to children, and provides funds for children's homes, nurseries and holiday camps. Among the homes, the buildings of the "Colnet d'Huart" Foundation are the largest. One of the new nurseries was inaugurated last March by the efforts of the "Felix Schroeder" Foundation. Among its other activities, the Luxemburg Red Cross includes a home assistance service, an aid for the blind, and the typical program of first-aid teaching. The courses are jointly organized by the Red Cross and the Luxemburg Civil Defense.

A specialty of the *Finnish Red Cross society* is its activity beyond the Arctic Circle, where the population is very much scattered. The Red Cross of this country maintains a *hospital at Utsjoki,* 250 miles north of the Circle. It serves the inhabitants of the frontier regions between Finland and Norway. The majority of the patients are expectant mothers. In connection with such a northern service, the Red Cross also operates an air ambulance, so that the rigors of the climate do not affect the emergency services of the society in any way.

The third St. Vincent Prize of the *Turin Academy of Medicine* was awarded to Prof. Ragnar Granit, director of the Nobel Institute for Neurophysiology at the Karolinska Institute of Stockholm. This award is an international prize for achievements in the field of medicine, and nominations for winning the prize are made by universities from all parts of the world. This year, nineteen prominent medical men were nominated, some of them Englishmen and Americans, such as the anatomist Magoun, the biologist Perutz, etc. *Granit,* who had also participated in the contest of last year, presented numerous publications in the field of neurophysiology, related particularly to sensory receptors and perception, control of movements, function of the Purkinje cells of the cerebellum, study of postural reflexes, of clonus, hypertonia and spasm, neural activity of the retina, etc. The first winner of *the St. Vincent Prize,* awarded in 1959, was Waksman, while the winner of last year's prize was Alessandro Vallebona. This year, among the nominees we found also Prof. Clarence Crafoord, director of the Chest Clinic at Stockholm, who is a cardiovascular surgeon, and the inventor of the Crafoord-Senningh cardio-pulmonary apparatus. The St. Vincent Prize is now appreciated all over the world of medical research, and its winning transfers as great an honor upon the receiver as the Nobel Prize.

Problems of radioactive contamination are with us everywhere in the world. Should any such contamination occur, then, for instance, the farmer has to meet such problems as how to protect his *cattle and agricultural produce.* It is a general rule that radiation caused by fallout has no effect on foodstuffs themselves. But if fallout settles on foodstuffs or cattle-feed which are lying in the open, such foodstuff becomes dangerous for consumption. The radioactive particles penetrate into the organism, and either pass into the urine or the milk, or settle in the internal organs. Radioactive iodine penetrates into the thyroid gland, strontium into the bones, caesium into the muscles. Crops or cattle-feed can be protected against contamination by covering them with paper sacks or similar such material.

One has to be careful, though, at the removal of such wrappings. These and similar related problems have been studied by the *Directorate of Veterinary Departments of Denmark,* and a few simple directives were issued on measures to prevent radioactive contamination on the farm. One of the golden rules is that "allow the cattle to eat contaminated feed or to drink contaminated water rather than to have them die of starvation or of thirst."

Another small European country, *the Netherlands,* is worried about *its food supply,* especially if it would come to any national emergency. There is not enough land available, and the Dutch farmer sets up hothouses to get two or more crops a year from the same area. He buys fodder abroad so that he can raise pigs and chicken, produce milk, butter and cheese on an almost industrial scale. In an emergency, when all import will be cut off, the country must become self-supporting. This means that all available food which is *fit for human consumption must be reserved* for that purpose, and that all available soil must be used for production of human food. Hence, all chickens and pigs must be killed off and eaten. Some may be saved; just to be fed on peelings and other refuse. Cattle will be kept alive since they eat food that is unfit for the citizens; moreover, they produce milk which is extremely valuable. At present, the average Dutchman eats 4 lbs. of bread a week, 2 lbs. of sugar, 4 lbs. of potatoes, and so on, with lots of fat. In other words, the *Dutchman's daily caloric* intake reaches 3000 calories. When he has to live on the native agricultural production, he may go down to 2000 calories, but nobody ever died of malnutrition on 2000 calories a day.

French scientists protest against the plan, already approved by various international organs of Atomic Energy administration, that the oceans, and particularly the Mediterranean Sea be used as a sort of *cemetery for the radioactive waste material* of the various nuclear centers. One of the most vehement objectors is Cousteau, Director of the Oceanographic Institute of Monaco. Other oceanographers and marine biologists join him in such a protest. Last December, physicists of the *High Commissariate of Atomic Energy* gathered to discuss this problem, and they made a resolution according to which the oceans should not be used for a dumping ground of radioactive waste. The only way to keep such material out of the reach of living beings is by "enterrement," they say. On the other hand, a simple calculation would show that *nothing is to be feared by dumping radioactive waste* into the ocean. The maximum permissible concentration of radium in the drinking water is 40 grams per one cubic kilometer. At present, the water of the ocean contains only 0.1 gram radium per km.[3] The total amount of global water is more than one billion cubic kilometers. It is very improbable that so much radioactive waste could ever be produced which would raise the radium content of the oceans even to the permissible level. Of course, when we consider the living organisms in the seas and oceans, in whose bodies the radioactive substances could reach much higher concentrations, the problem becomes much more complicated.

Public health made great advances *in Syria.* Until 1947, the *Public Health Service* of that country was under the management of the Ministry of Interior. Then, a special ministry was created for public health and public assistance, together with an advisory Health Council. The ministry of health has an administrative, a preventive and a curative division, while a special department is looking for international cooperation. Syria is a member of the World Health Organization, and the country received much *profit from international help* in its various health campaigns. Syria's population settlement is very uneven, and about 20 persons is the average to a square kilometer of land. The eastern desert area, the larger portion of the country, is almost depopulated, while on the coastal area in the north we find the largest density of population, in addition to the interior large cities. On the coast, in the *region of Latakia,*

where the climate is rather variable and humid, cases of tuberculosis are again reappearing. For this reason, the *tuberculosis campaign* was concentrated around this area. Otherwise, tuberculosis is not widespread in Syria because the climate and the nutrition are against it, and even the social conditions are such that—with the lack of a metropolitan proletariat—no favorable culture media are created for the Koch bacillus.

Malaria is also steadily retrogressing in Syria, thanks to the DDT and other insecticides which were introduced in 1949. The *area of Damascus* was treated, as well as the agricultural parts of the country where an extensive irrigation system provided many breeding places for the *Anopheles* mosquitoes. Since 1953, the swamps and marshes have been systematically converted for the use of agriculture. Flies are less abundant in Syrian towns than elsewhere in the Orient. In the old part of Damascus, special vehicles pass through the streets daily, and they spray insecticides all over the town.

Mycotic infections of the skin were quite common formerly, but energetic measures have been introduced, already among the school children, against the many forms of dermatomycosis. School children also received various types of preventive vaccinations, such as against smallpox, against tuberculosis, but the BCG vaccination is still not universal. A *rabies center* was established in Damascus, and patients bitten by rabid dogs are not being sent any longer to Beyrouth in Lebanon. Rabies is not infrequent, since wild and unsupervised dogs are thriving in big hordes in Syria. Extraordinary steps were taken against a syphilis-like disease, which is called *the "bejal."* The disease usually does not lead to a tertiary stage, with participation of the central nervous system, but it rather likes to devastate the skin and to cause horrible scars, and deformities of the nose. It is almost exclusively seen in the desert regions along the Syria-Iraq boundary line *among the nomad Arabs.* It may be supposed that the disease came to Syria from the port of Basra and along the Euphrates. Its treatment with antibiotics, especially in the early stage, is very satisfactory.

Other *typical Syrian diseases* are bilharziasis, abdominal typhus, amebic dysentery, etc. A controlled dairy economy is still unknown in the country, and the milk is still not generally pasteurized. An interesting legal measure in social welfare is the *Law of Health Card.* This law permits poor people to request the issuance of a health card for themselves and for their family members by the local authorities. With such a card in hand, they may visit all State-owned hospitals and dispensaries gratis, and obtain free treatment in serious cases. Yet, Syrians like to pay for their medicines and for their doctors, since the belief is universal that physicians who do not charge, and medicaments which do not cost anything, are also of not much value.

Syria is short of experienced and *trained nurses.* This is partly due to the fact that the nurse's vocation is not held in high esteem. The country has about 30 government-owned *hospitals,* with about 5000 beds. Private clinics exist in the larger cities. The Syrian physicians are mostly trained at the *University of Damascus,* where the language of instruction is Arabic. This results in some difficulties in the branches of natural sciences. Textbooks are still to be written and published, and the staff of the medical schools must be nationalized, although many well-qualified Arab lecturers are available. A physician trained abroad is still enjoying a high reputation in Syria. This tendency is the reason for many physicians putting on their door-plates the cities where they obtained their education, e.g., Dr. So and So, education University Paris, or Berlin Charité. The present number of *practising rural physicians* is about 1200, of whom 50% are employed in government service. The salaries are small, and the competition in medical business is keen. Often, trustees are employed who praise the value of a particular physician at public places, as a German physician asserts (Dr. Fischer) who spent several years among the Syrians.

Foreign physicians find the living hard *in Syria.* Their income is much lower than in their native countries. Moreover, unless one settles down in a city, the knowledge of the vernacular language is essential for survival. Yet, German physicians are generally well liked. It is also easier for a patient to cheat the foreign doctor. The Syrian wishes to *bargain about the fee;* even the price of an emergency operation is best stipulated in advance. Moreover, the Syrian patient never has full confidence in one doctor; he also likes to be examined by several doctors and by machines, and treated by the miracle drugs. He does not like to give a history of his health (anamnesis), or to tell much about his symptoms. In the rural areas, gynecology and obstetrics is almost entirely in the hands of women. Actually, most women prefer *treatment by a trained nurse* or midwife. In young girls, as a rule, the hymen is intact. The woman's place in public life and in the family is still an inferior one. Nevertheless, she often carries the burden of the entire family, especially in the rural areas. Women over 30 years of age are practically worn out; yet, there is no word of complaint from these pitiful persons.

At Lonavala, near Poona, in the *Maharashtra State* of United India, a *Yogic Hospital* was opened last April. The institution has accommodation for 28 patients who will be carefully selected for treatment by the Yogic method. Before admission to the hospital, the patient has to fill out an elaborate questionnaire. Regulated diet, and mode of life, with restrictions of smoking, of stimulating beverages and intoxicating substances will be insisted upon. Suitable Yogic practices and procedures will be prescribed, and daily prayers and meditation will be a part of the routine, for their psychophysiological effect. Nevertheless, the hospital has a laboratory which is equipped with modern instruments in electronics, physics and biochemistry, an electro-encephalograph spectro-photometer, etc. The laboratory staff takes observations with these instruments on the different phases of Yogic practices. Elaborate observations are made on the respiratory, circulatory and central nervous functions in the so-called *"samadhi" state or Yogic trance.* Special closed chambers, so-called "burial chambers" are constructed, with facilities for days of observation in this state. The institution is for chronic functional ailments and their treatment by disciplined life and Yogic practices.

Health without spiritual health is considered incomplete in Indian culture. *Spiritual well-being* is also a high aim, in addition to physical, mental and social well-being. Undesirable emotions are considered to be diseases. Hence, detachment and self-control are essential for health. Control of physical desires and of the mind are the aims of Yogic practices in order to develop spiritual health, which is considered supreme. According to *Hindu and Buddhist philosophies,* unlimited spiritual well-being comes only through austere and disciplined living. The Indian home is usually filled with love and harmony. These act as buffers against sudden shocks in life.

In 1958, March and afterwards, many hundreds of cases of an unusal type of meningitis of obscure origin occurred *in Tahiti,* French Polynesia. It was called *"eosinophilic" meningitis* because the cells in the cerebrospinal fluid were mostly of such type. The disease was manifested by headaches, stiffness of the neck and back, and different types of paresthesia. Some patients had paralyzed facial muscles. Though no deaths occurred, recurrences were frequent. Various examinations did not reveal any virus or bacterium or fungus. Mostly adult Polynesians were attacked. It did not seem to be a communicable disease. It is believed that a helminthic parasite of the skipjack tuna or oceanic bonito (*Katsuwonus pelamis*) and of other pelagic fish may be the cause of this meningitis, since this fish is commonly eaten raw in the island. Meanwhile, some cases of *helminth-caused meningo-encephalitis* have been recognized from the Hawaiian Islands. These may have a similar pathogenesis as the Tahiti infestations.

It seems that more and more news is ap-

pearing to prove that smoking is no more the harmless and peaceful addiction one used to believe. Indeed, *tobacco is now blamed* for such troubles as infarction of the heart, cancer of the lung, obstructed circulation of the extremities, stomach ulcer, etc., etc. In many states and health ministries, special commissions have been established for the study of both the dangers of tobacco and the steps which can be taken for the prevention of harm. Such a commission has been created recently *in Czechoslovakia.* It is composed of seven scholars, some of them also smokers. But the matter is of such a great international significance that sooner or later the World Health Organization will have to take a stand on the issue. In Czechoslovakia, at Hradec Králové, near Praha, a small group of physicians gathered for the study of the evils of tobacco, and to aid everyone who wants to give up smoking voluntarily. *An anti-tobacco dispensary* was also opened here in which physicians can be consulted on the smoking habit. During one year of activity, the dispensary was visited by more than a thousand persons, mostly men between 30 and 50 years of age. Among them, 90% were able to stop smoking completely, after passing through a special cure against their addiction. Similar "anti-fumatory" centers have been also created in other large European cities. The man of the future, if he wishes to have long life, full of activity and good health, must decide the issue of smoking.

In the Australian city of *Darwin, a War Memorial Cathedral* is about to open. During the Second World War, many American servicemen were stationed in this city, and indeed the Cathedral itself is erected on the site where a large American Army camp was situated in the center of the city. Air bases and naval headquarters were also situated nearby. It is also symbolic that the cornerstone of the Cathedral was taken from an open-cut uranium mine. As a war memorial, the church will express thanksgiving for the fact that the cities of Australia were not destroyed, like Coventry, Amsterdam and Hiroshima, and that Australia was not enslaved like Poland, Hungary and North Korea. A special shrine will house the life-size oil painting, *"The Madonna of the Aborigines."* The majestic arches of the cathedral of Darwin are not only the expression of great faith in the future, but also an inspiration to look with the Psalmist "unto the heights, from whence cometh our help"! . . . MERRY CHRISTMAS! And *Multa paucis!*

NOTES

Timely items of general interest are accepted for these columns. Deadline is 1st of month preceding month of issue.

Department of Defense

Deputy Ass't Sec'y of Defense (Health and Medical), Off. Ass't Sec'y of Defense for Manpower—FRANK B. BERRY, M.D.

ADOPTS POLICY ON EXPERIMENTAL ANIMALS

The United States Department of Defense has adopted an instruction establishing policy and assigning responsibilities governing the use, care and certain public information aspects of experimental animals involved in the research, development, test and evaluation programs of the Army, Navy, Air Force and associated organizations. The policy instruction is dated September 1 and contains the following provisions:

General—The Department of Defense is one of the Federal Agencies which, along with the scientific community and a majority of the United States public, supports the use of experimental animals in research. The contributions toward the achievement of national defense objectives and to the public welfare that have come from scientific investigations involving the use of experimental animals are abundant and renowned. It is anticipated that investigations with experimental animals in support of national defense requirements will increase because of the widening scope of military operations and their concommitant physical and psychological stresses. Despite general acceptance, the use of animals in research has proved to be a sensitive subject among various groups of the United States and foreign countries. In that the Department of Defense desires that laboratory animals be treated with due professional and ethical consideration, the policies established herein will be a guide to all Department of Defense agencies in matters involving the use of experimental animals.

POLICY

A. On the Care of Experimental Animals

1. It is the policy of the Department of Defense that all aspects of investigative programs involving the use of laboratory animals and sponsored by Department of Defense agencies will be conducted according to the Principles of Laboratory Animal Care as promulgated by the National Society for Medical Research. Said Principles represent the views of the American professional groups in the life sciences.
2. Laboratory staffs and facilities must in all cases be sufficient to meet the high standards desired. Important considerations in this regard include the providing of all necessary support services such as veterinary care and trained service personnel, and optimal facilities for both intramural and extramural projects.

B. On Public Information

1. The timely release of information about investigations using laboratory animals tends to improve public understanding and acceptance, especially when it can be shown that the results help to solve military problems or contribute to better human health and welfare.

2. The release of information about experiments involving animals prior to the actual accomplishment of the experiment should be the exception rather than the rule.
3. Material for release to both the scientific community and the lay public will whenever feasible contain full information relevant to humane procedures utilized and other evidence of excellent animal care by reference to such items as the observance of the Principles of Laboratory Animal Care, the use of anesthesia, etc. Special attention will be devoted to assuring that all material, written, oral, and visual, will be generally acceptable, especially as regards the procedural aspects of animal experiments.
4. Security review of material for public information release will be in accordance with existing directives.
5. Identification of the species and birthplace of monkeys will be indicated in public information material when feasible.

RESPONSIBILITIES

The Secretaries of the Military Departments and heads of other Department of Defense agencies shall be responsible for prompt and effective compliance with the policies described in this instruction.

JAPANESE INTERNS

Forty-two graduates of Japanese medical schools were accepted for internship at four U. S. Forces hospitals in Japan recently during the annual tri-service examinations which were held at the U. S. Army Medical Command Japan Hospital, Camp Zama, near Tokyo. There were 85 applicants.

The Japanese medical students will intern at the U. S. Naval Hospital, Yokosuka; 6022nd U. S. Air Force Hospital, Johnson Air Station; USAF Hospital, Tachikawa Air Base, and USAMCJ Hospital, Camp Zama.

The Tri-Service Intern Selection Board was comprised of: Captain Harry A. Weiss, MC, USN; Lt. Colonel Bernard E. Flaherty, USAF, MC; and Major Harvey W. Phelps, MC, USA.

U. S. Army Photo

Japanese Medical students taking written tests for internship in American hospitals in Japan.

Army

Surgeon General—LT. GEN. LEONARD D. HEATON

Deputy Surg. Gen.—BRIG. GEN. HOWARD W. DOAN

RECALL TO DUTY

The Department of the Army has announced a policy change that precludes the call to active duty at this time of certain Medical, Dental, and Veterinary officers of the Ready Reserve who have already completed more than 21 months active service and are not currently members of Reserve or National Guard Units.

Officers who have completed 21 months or more of prior active duty exclusive of periods spent in student programs prior to receipt of the appropriate professional degree or in intern training—will not be involuntarily ordered to active duty as individuals.

This policy will not be applicable to those who were called or may be called as regularly assigned members of a Reserve or National Guard Unit, participating in a pay status.

Affected officers who entered on active duty subsequent to 1 September 1961 may request relief from active duty if they so desire. Also, those currently under orders who

have not yet entered on active duty may request revocation of their orders.

This does not reflect a reduction in the needs for the Army. It is based on a decision to obtain unit filler personnel through the use of individuals without prior service, and available through the Selective Service System.

ASSIGNMENT TO SGO

Lt. Colonel Anthony W. Urbine, MSC, USA, has been assigned as Assistant for Combat Development in the Directorate of Plans, Supply and Operation, Office of the Surgeon General. He comes to Washington after a year's duty with the U. S. Army Advisory Group in Korea.

KENNER HOSPITAL

The Army hospital at Fort Lee, Virginia, will be named the Kenner Army Hospital, for the late Major General Albert W. Kenner, Army Medical Corps.

General Kenner served in the European Theater in both World War I and II. He graduated from George Washington University with both Ph.D., and M.D. His distinguished service obtained for him the Distinguished Service Cross, the Silver Star and the Purple Heart.

HONORED

Colonel Robert B. Shira, DC, USA, Chief of the Oral Surgery Section, Dental Service, Walter Reed General Hospital, has been awarded The Order of the Sword of Hope, the highest individual award of the American Cancer Society's Pennsylvania Division.

The citation reads: "He has been a major force in developing the Division's present professional education program in oral cancer. His contribution to the cause of control of oral cancer has been inestimable, as the hundreds of dentists and other medical professionals who have attended oral cancer institutes enthusiastically attest."

BECOMES EXECUTIVE DIRECTOR

Dr. Charles D. Shields, Consultant to the Surgeon General of the Army, has been designated as Executive Director of the Georgetown University Hospital, Washington, D.C. He served in the Army Medical Corps during World War II. He is Vice-president of the American Congress of Physical Medicine and Rehabilitation.

DISASTER TRAINING

There is a great need for disaster training in this country. Now that emphasis is on the atomic bomb shelters we might get enthusiastic about the training which the Army wives in Fort Sam Houston have started.

Recently a course sponsored by Mrs. James L. Snyder, wife of the Commandant of the Medical Field Service School, Major General Snyder, was instituted at Fort Sam Houston. The course started is for non-medical persons.

The feeling of helplessness and the utter frustration that occurs to many at times of disaster can be eliminated by thorough preparation before emergencies occur.

One course will not be enough. This is a continuous education that will require refresher courses from time to time. Furthermore this is a nationwide responsibility for all.

AT BAMC

Brooke Army Medical Center welcomed the 305th Field Hospital from Gulfport, Mississippi on October 11. This was the first U. S. Army Reserve medical unit at that Center. Colonel William G. Nichols, Gulfport is the commander. The unit is attached to the 67th Medical Group and is expected to be on duty at the Center for one year.

An intensive training course is planned. This will include field problems, lectures at the Medical Field Service School and on-the-job training at Brooke General Hospital. Emphasis will be given to the upgraded responsibilities which may be demanded from all in order to care for the casualties of a possible nuclear attack.

AWARD PRESENTED

The 58th Medical Battalion, Fort Ord,

CDEC CHIEF OF STAFF, COL. H. G. MCFEELY (left) awards the Commanding General's Meritorious Unit Award to 58th Medical Battalion; LT. COL. WILLIAM SCHONGALLA and BN SGT. MAJ. P. R. MARSHALL receive award.

California, was recently presented the Commanding General's Meritorious Unit Award for permanent retention. This award is given the unit which achieves consistently outstanding results in implementation of programs and activities directed toward increasing unit military proficiency, good citizenship and esprit de corps.

RETIRED

Brigadier General David E. Mayer, Medical Corps, U. S. Army Reserve, of Rutherford, New Jersey, and Manhattan, was recently retired, having reached the statutory age of 60.

General Mayer, a plastic surgeon, formerly commanded the 818th Reserve Hospital Center, a major command responsible for the training of 35 non-divisional medical units located in New York and New Jersey.

A graduate of the Infantry Officers Candidate School at Fort Benning (1918) and of Culver Military Academy (1923) he was assigned to the 77th Infantry Division as adjutant of the 306th Infantry Regiment. He holds B.S. and D.D.S. degrees from Columbia University, and the M.D. degree from New York Medical College. During World War II he served at LaGarde General Hospital in New Orleans, La., Camp Bullis, Texas, and as Commanding Officer of the 236th General Hospital in the Central European and Rhineland campaigns. Later he served in the Pacific Theater.

General Mayer is associated with the Flower-Fifth Avenue Hospital in Manhattan and the General Hospital, Paterson, N.J.

A THOUSAND CRANES

A gift of a thousand cranes ("Senba-Zuru"), that is paper cranes, was made to Major Jacob Pokras, Chief of Blood Bank and Serology Department, Medical General (406th) Laboratory, U. S. Army Medical

U. S. Army Photo

MAJ. POKRAS and MR. OTA examine the "Senba-Zuru."

Command Japan, by Mrs. Hinako Kido, an elderly Tokyo lady. This all came about through the intensive search for Rh negative blood by Major Pokras so that two Japanese children could undergo heart surgery. Mr. Seibi Ota made the presentation of the cranes to Major Pokras.

GASTROENTEROLOGIST RETIRES

Dr. Walter Lincoln Palmer, Consultant in gastroenterology to the Surgeon General of the Army during World War II, and one of the original eight faculty members of the School of Medicine of The University of Chicago, has retired. He will continue with

the University in an emeritus capacity for the present.

PLASTIC SURGICAL INSTRUMENTS

Surgical instruments ranging from retractors to various cutting instruments made from polycarbonate resins have been developed at the Army Medical Service's Medical Equipment Development Laboratory, Fort Totten, New York.

These instruments will conserve metal in time of national emergency. They can be produced faster with less skill, and are lighter than the metal instruments.

Navy

Surgeon General—REAR ADM. EDWARD C. KENNEY

Deputy Surgeon General—REAR ADM. ALLAN S. CHRISMAN

APPOINTED REAR ADMIRAL

Doctor Paul W. Greeley, consulting plastic surgeon of the Westside Veterans Administration Hospital, Chicago, has been appointed a Rear Admiral, Medical Corps, U. S. Naval Reserve, to date from July 1, 1961. His appointment was delivered to him recently during ceremonies at the U. S. Naval Hospital, Great Lakes, Ill., by Rear Admiral Courtney G. Clegg, Commanding Officer.

U. S. Navy Photo

REAR ADM. PAUL W. GREELEY, MC, USNR

Admiral Greeley is an attending plastic surgeon and chief of plastic surgery at University of Illinois Hospitals and Presbyterian St. Luke's Hospital, and a member of the Board of Consultants to the Surgeon General of the Navy.

RETIRED

Recently retired from the Navy: Captains Theodore R. Austin, MC; Donald M. Coughlin, DC; Fred E. Goodell, DC; Commanders William F. Anderson, MSC; Victor L. Pellarin, MSC; Lieutenant Commanders Robert E. Deadwyler, MSC; Harry C. Gibbons, Jr., MSC; Glen A. Herndon, MSC; Rodney R. Rever, MSC; Malgum E. Whitt.

Air Force

Surgeon General—MAJ. GEN. OLIVER K. NEISS

Deputy Surg. Gen.—MAJ. GEN. RICHARD L. BOHANNON

NEW CHIEF, MEDICAL SPECIALISTS

Colonel Kathleen R. Creech has been appointed Chief of the Air Force Medical Specialist Corps, effective December 1. She succeeds Colonel Audrey A. Underkofler who has retired and resides at 6004 Berkshire Dr., Bethesda, Md.

Colonel Creech comes to this assignment from 2nd Air Force where she served as Command Dietetic Consultant and Director of the Hospital Food Service at Barksdale Air Force Base. She holds a bachelor degree from Battle Creek College, Michigan, and a master degree from Michigan State University. During World War II she served in the European Theater.

Public Health Service

Surgeon General—LUTHER L. TERRY, M.D.

Deputy Surg. Gen.—JOHN D. PORTERFIELD, M.D.

COMPETITIVE EXAMINATIONS

Competitive examinations for appointment of physicians, dentists, veterinarians, sanitary engineers, and sanitarians for the Regular Corps of the U. S. Public Health Service Commissioned Corps will be held throughout the United States on February 13, 14, and 15, 1962.

Completed application forms must be in the Office of the Surgeon General, U. S. Public Health Service, Washington, D.C. by January 5, 1962.

Active duty as a Public Health Service officer fulfills the Selective Service obligation for military duty.

Further information may be obtained from the Surgeon General, U. S. Public Health Service (P), Washington 25, D.C.

APPOINTMENT

Dr. Wilson T. Sowder, a career officer in the Public Health Service and State Health Officer of Florida since 1945, has been appointed as Chief of the U. S. Public Health Service's new Office on Aging.

The Office on Aging, will develop policies, give consultation and guidance, and help in the existing efforts of the Service in the broad field of health of the aging.

NATIONAL HEALTH SURVEY

New members appointed to three-year terms on the Surgeon General's Advisory Committee on the U. S. National Health Survey are: J. Douglas Colman, New York; Harry Hineman, Indianapolis; John Park Lee, New York; Daniel W. Pettingill, Hartford, Conn.; Dr. Russell B. Roth, Erie, Pa.; Mrs. Mary Weaver, Washington; and Donald Young, New York.

The function of the Advisory Committee is to review plans and progress of the National Health Survey and assist in formulating principles and methods of cooperation with private and public organizations. It was established by Congress in 1956 as a continuing program to determine the amount and kind of illness in the population and to gather information on related health topics such as disability, accidental injuries, and hospitalization.

RESEARCH IN PATIENT CARE

Faye G. Abdellah, R.N., Ed.D., Assistant Chief, Research Grants and Fellowships Branch, and also Senior Consultant in Nursing Research for the Division of Nursing, U. S. Public Health Service, recently, at the American Heart Association meeting in Miami, called for intensive research in patient care to raise the "practice of nursing" to the "science of nursing."

She cited an extramural project, "Nursing Needs of Chronically Ill Ambulatory Patients," at Cornell University Medical College in New York. In this they are focusing on the "human" side of elderly patients, many of whom have cardiac disorders. Nurses and social workers are interviewing patients and discussing not only physical symptoms, but friendships, recreational preferences, and personal idiosyncracies in eating, sleeping, and other habits. This important information is then "fed back" to the clinical team to assist in the total care of the patient.

REHABILITATION RESEARCH

The first rehabilitation-research-training center was recently established at New York University's Institute of Physical Medicine and Rehabilitation and will be under the direction of Dr. Howard A. Rusk. The grant of $500,000 was made by the Office of Vocational Rehabilitation of which Miss Mary E. Switzer is Director.

It is planned that a limited number of such centers will be established at universities that have medical schools with comprehensive teaching and research programs in physical medicine and rehabilitation, as well as resources for research in other phases of rehabilitation and for training workers in various disciplines, including medicine.

ARBORVIRUS UNIT

The Communicable Disease Center of the U. S. Public Health Service, Atlanta, Geor-

gia, has been designated as the WHO Arthropod-borne Virus Regional Reference Laboratory for the Americas. Dr. Telford Work is Chief of this new unit as well as of the CDC virus and rickettsia laboratories.

The Communicable Disease Center Arborvirus Unit will offer reference diagnostic services to public health laboratories through the Americas for the detailed identification of arboviruses. More than 125 viruses are known to be carried by arthropods throughout the world, and 51 of these are known to cause human infection and disease.

WHIPPLE'S DISEASE

Patients with Whipple's Disease are wanted for study at the National Institutes of Health, Bethesda, Maryland. Physicians having such cases are asked to contact Dr. Leonard Laster of the Institute. Should a telephone call be placed the phone number is 496-4201, Washington.

Whipple's Disease is also known as Intestinal Lipodystrophy. The disease is characterized by loss of weight, arthritis, and intermittent diarrhea with fatty acid stools.

SEWAGE TREATMENT PLANTS

To combat pollution of rivers and streams, the new anti-pollution law signed by President Kennedy recently provides for increased grants to communities for building sewage treatment plants. An increase of $30 million is provided for FY 1962 bringing the amount to $80 million. In 1963 there will be $90 million available, and then for the next four years the amount will be $100 million annually.

Combating pollution of rivers and streams is one of the major health projects of this Administration.

Veterans Administration

Chief Medical Director—WILLIAM S. MIDDLETON, M.D.

Deputy Chief Med. Dir.—H. MARTIN ENGLE, M.D.

APPOINTMENTS

Dr. Jay T. Shurley, Chief of Psychiatry Service, Oklahoma City Veterans Administration Hospital, has been appointed a Veterans Administration senior medical investigator. This means full-time research. He is also professor of psychiatry at the University of Oklahoma School of Medicine.

Dr. Shurley is known for his research on sensory isolation, in which volunteers remain submerged for hours in a tank of water. In future research, he plans to measure, electrically, hallucinations produced by sensory isolation in volunteers.

Dr. Albert E. Pugh has been appointed director of the Veterans Administration at Clarksburg, W.Va. He is a graduate of the University of Kansas School of Medicine. He served in the Army from December 1942 until July 1946 at which time he joined the Veterans Administration.

STATISTICS

The veteran population in civil life at the end of September 1961 was 22,376,000. At the end of September 1960 there were 22,504,000. In that period of time the number of World War I veterans dropped from 2,646,000 to 2,538,000.

The average daily patient load during September 1961 for veterans in hospitals was 113,514. Visitors for medical care during the same month was 203,500.

SERVICES CONSOLIDATED

The Pulmonary Disease Service of the VA Department of Medicine and Surgery has been consolidated with the Medical Service. The combined operation will be known as the Medical Service and Dr. William B. Tucker has been named acting director.

Dr. J. M. Rumball, who was director of the Medical Service, has been called to active military duty with the 354th General Hospital, U. S. Army.

REHABILITATION OF MENTAL PATIENTS

The Veterans Administration is constantly seeking to return more mental pa-

tients to their communities through foster homes, half-way houses, day care centers, and vocational counseling and job placement.

The yearly number of those that have been returned to their communities has tripled in less than ten years. In Fiscal Year 1953 there were 7617 returned to their home communities. In FY 1961 the number was 20,907. The yearly turnover rate has increased from 66 per cent in 1955 to 85 per cent in 1961.

Miscellaneous

DIAGNOSIS OF CASE—SEE PAGE 923

Diagnosis of case: Pneumococcal lobar pneumonia, right upper, middle, and lower lobes.

Pneumococci were recovered in postmortem cultures of blood and lung.

DR. SCHULTZ, VP AND DIRECTOR

Captain Robert V. Schultz, Medical Corps, U. S. Navy, Retired, is now Vice President and Director of the American Museum of Health, 550 First Avenue, New York 16.

The American Museum of Health has been granted a Charter, as an educational institution, by the Board of Regents of the University of the State of New York. The newly-created institution will erect a $3.5 million Hall of Medicine and Public Health at the World's Fair 1964-1965 in New York. It is planned to develop this as a permanent Health Museum in New York City.

Serving on the Board of Trustees is Dr. George E. Armstrong, former Surgeon General of the U. S. Army, and now Vice President for Medical Affairs of New York University and Director of the New York University Medical Center.

NUTRITION IN LATIN AMERICA

In most of Latin America malnutrition is one of the acute problems, according to Dr. J. M. Bengoa, Pan American Health Organization.

In most Latin American countries the daily consumption of animal protein is less than 20 grams and in many cases less than 10. Per capita food production is less than before World War II.

Said Dr. Bongoa, "Every year Latin America must produce food for five million more mouths and even if food production parallels the 2.5 per cent annual population increase—highest in the world—the available food per person will remain the same."

The need for more land to be opened for cultivation is great. The land is there. Only seven per cent of the arable land is under cultivation. Between three and eight per cent of the landowners own 60 to 80 per cent of the cultivable land.

He also said before the Directing Council of the Pan American Health Organization: "The average educational level in Latin America is only two years of schooling and 40 per cent of the population over 15 years of age is illiterate. The number of illiterates is about 40 million. Over 15 million school-age children have no educational facilities. Less than ten per cent of the children who enter the first grade complete their primary education."

SMALLPOX

Seven American countries reported a total of 4791 smallpox cases during 1960. This is an increase of 28 cases over 1959 for the hemisphere. However, it is less than half of the 9301 cases recorded ten years ago. The cases for 1960 were distributed as follows: Brazil 2278, Ecuador 2185, Colombia 209, Argentina 64, Paraguay 35, Uruguay 19, Bolivia 1.

In the first eight months of this year there were 631 cases of smallpox in Rio de Janeiro alone.

MALARIA

The Pan American Health Organization estimates the cost of eradicating malaria from the Americas by 1967 at $199,750,000. There are 5,125,000 square miles of the western hemisphere still infested with malaria. The populations at risk in these areas total 88,339,000 persons.

Money wisely spent toward an intensive

campaign to eradicate this disease is well worth while. We would hope that each country would make a great effort to do away with this disease in its borders.

In the first 42 weeks of 1961 there were only 46 cases of malaria reported in the United States, a country that used to consider this disease a very major problem. In the same period of time in 1960 there were 59 cases reported. In view of the fact that our soldiers have been scattered over the world in malarious regions and a goodly portion of them have contracted the disease in foreign countries it is remarkable that we have been able to hold the number to so low a figure in 1961.

CANCER DETECTION

An automatic analyzer, called a "cytoanalyzer," has been developed for the mass screening of cervical and vaginal smears for the detection of cancer. The machine is expected to perform in less than an hour the number of examinations that would require a skilled cytologist a full day.

Two of these machines are currently in experimental use, one at the Sloan-Kettering Institute and the other at the U. S. Public Health Service in Hagerstown, Md. The machines do not eliminate the cytologist for their purpose is to screen out the suspicious cases for the more detailed examination by the cytologist.

REPLACED DAMAGED SUPPLIES

During the hurricane Carla there was considerable damage to pharmacy stocks in the path of the hurricane. Many pharmaceutical manufacturing firms undertook to replace these damaged stocks at no cost to the individual pharmacy. This has been accomplished by the personal inspection of the damaged drugs by the local representatives of the pharmaceutical companies. Most of the firms stated that the replacement was for the stocks that had been uninsured.

SAMPLE DRUGS

Ciba Pharmaceutical Products Inc. has launched a program for die stamping the word "sample" on tablets and capsules to be used in its professional promotion. This sounds like an excellent way to curb the misuse of drug samples.

We would also suggest that drug samples not be sent to physicians unless they request them. Physicians have a great problem of disposing of the unused samples. Hospitals generally do not want them for this throws the burden of unpackaging on their personnel and the attendant risk of getting the drugs mixed up. To dispose of the unused samples by throwing them into the trash can is not only dangerous but may lead to some civil action should the drugs get into the hands of persons who cannot know their potency. The only safe way to get rid of the unused samples is to throw them down the drain and follow with a good supply of water. That takes valuable time from the physician who must himself be responsible for the disposition of these drugs.

RESEARCH SPENDING

According to Dr. George W. James, economist at Battelle Memorial Institute, Columbus, Ohio, research spending in the United States in 1962 will approach $16 billion for all types of research. This is over five times as much as that spent in 1950.

The U. S. government comes in for a large portion of this money for research. Of course, this is taxpayers money. The amount is said to be $10 billion. Industry will contribute $5.5 billion and universities and foundations about $350 million.

CLOTHING FOR HANDICAPPED

To aid in the selection of clothing for the handicapped the Institute of Physical Medicine and Rehabilitation, New York University Medical Center, has published "Functional Fashions for the Physically Handicapped."

The 80-page booklet which is profusely illustrated can be obtained for one dollar from the Institute, 400 East 34th St.. New York 16.

NEW ADDRESS

The National Society for Medical Re-

search has moved its offices from Chicago to Rochester, Minnesota and will be located at 111 Fourth St., N.E., that city.

This move has been made to take fullest possible advantage of the leadership of the Society's new President, Dr. Hiram E. Essex of the Mayo Foundation for Medical Education and Research.

SIX YEAR COURSE GIVES M.D.

Boston University believes that a student can be prepared for the medical profession in six years. There were universities that did just that years ago. However more and more as the years went by the universities came to the eight year course.

Boston University recently awarded 15 scholarships totaling $8600 to freshmen participating in the new unified six-year program. Upon completion of the program both the M.D. and B.A. degree will be awarded.

This will be an interesting program to follow. The elimination of two years of costly medical education by the proper elimination of certain courses should assist in what is said to be a shortage of physicians.

ELECTROCARDIOGRAPHY COURSES

Home Study Courses in Electrocardiography, both basic and advanced, can be pursued through an arrangement with the Postgraduate Division of the University of Southern California, School of Medicine, 2025 Zonal Ave., Los Angeles 33, Calif.

THE MEDICAL LIBRARY ASSOCIATION

Chicago headquarters office is at 919 N. Michigan Ave., Chicago 11. Executive Secretary is Mrs. Helen Brown.

CANCER CONGRESS

The 8th International Cancer Congress will be held in Moscow, July 22-28, 1962. Attendance is limited to persons belonging to recognized scientific or medical organizations or individuals recommended by such bodies. Members of families of delegates may be enrolled as associates.

Rates? ? All the way from $4.00 a day to $35 a day. For this latter rate you will get a deluxe hotel room with private bath, a la carte meals, private car with chauffeur and guide three hours daily, transfers and porterage to and from airport or railway station by private car.

Interested and qualified? Write to the authorized representative in New York—Afton Tours, 1776 Broadway.

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Deaths

BONSIGNORE, Marco R., Colonel, Medical Corps, U. S. Army, Commanding Officer of the 20th Station Hospital in Europe, died October 5 following a heart attack. He was 54.

A native of Rochester, New York, Colonel Bonsignore graduated from Gettysburg College, then went to the Royal University of Rome, Italy, for his medical degree. He specialized in orthopedics. During World War II he served with the 26th Infantry Division in Europe. During the Korean War he was in charge of the Army's Orthopedic Center at Fort Campbell, Ky.

He is survived by his wife and four children, and his mother who resides at 208 North Morada, West Covina, California.

Interment was at Golden Gate National Cemetery.

WILSON, William J. Jr., Colonel, Medical Corps, U. S. Army, on duty with the 549th Hospital Center, U. S. Army, Germany, died on October 3 of a heart attack. He was 53.

A native of Chicago, Colonel Wilson attended the University of Illinois and received his medical degree from Boston University School of Medicine in 1933. He entered the military service in 1942 and served in the China-Burma-India theater during World War II. After the war he returned to civilian practice. He reentered on active duty in 1948. He was Surgeon of the Central Command in Japan during the Korean War, and has since served as Preventive Medicine Officer at Fort Bragg, N.C., and from 1957-60 in the Office of the Surgeon General.

He is survived by his wife and four children, and his parents who reside at 9261 S. Bell Ave., Chicago.

ZEHM, Abner, Colonel, Medical Corps, U. S. Army, Retired, died at Letterman General Hospital, San Francisco, September 27. He was 61.

Colonel Zehm, a native of North Dakota entered the Army in August 1927. He was Division Surgeon of the 2nd Armored Division throughout the North African and European Campaigns. He was a graduate of the Command and General Staff School, Fort Leavenworth, Kansas. Upon his return from a tour of duty in Germany in 1951 he became Fifth Army Surgeon in Chicago. His last tour of active duty was as Commanding Officer of William Beaumont General Hospital where he retired 1 November 1957.

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NEW BOOKS

Scobee's *Rehabilitation of A Child's Eyes.* 3rd Ed. By Herbert M. Katzin, M.D., F.A.C.S. and Geraldine Wilson, R.N. With Foreword by Richard G. Scobee. 107 pp., illust. The C. V. Mosby Company, St. Louis. Price $3.75.

Surgery. A Concise Guide to Clinical Practice. Edited by George L. Nardi, M.D. and George D. Zuidema, M.D. By 23 contributors. With Foreword by Edward D. Churchill, M.D. 1034 pp., illustrations by Edith S. Tagrin. Little, Brown and Company, Boston. Price $8.50 paperback: $12.00 clothbound.

Medical Physiology. 11th Ed. Edited by Philip Bard. With 16 contributors. 1339 pp., 508 illust., 4 in color. The C. V. Mosby Company, St. Louis. Price $16.50.

Mechanisms of Disease. An Introduction to Pathology. By Ruy Perez-Tamayo, M.D. 512 pp., illust. W. B. Saunders Company, Philadelphia, London. Price $14.00.

Introduction to Anesthesia. The Principles of Safe Practice. 2nd Ed. By Robert D. Dripps, M.D., James E. Eckenhoff, M.D. and Leroy D. Vandam, M.D. 413 pp., illust., line drawings by Leroy D. Vandam, M.D. W. B. Saunders Company, Philadelphia, London. Price $8.00.

Essentials of Clinical Neuroanatomy and Neurophysiology. New (2nd) Ed. By Manter & Gatz. F. A. Davis Company, Philadelphia. Price $3.00.

Treatment and Disposal of Radioactive Wastes. International Series of Monographs on Nuclear Energy, Division V, Health Physics. By C. B. Amphlett. 290 pp., illust. Pergamon Press, Inc., New York. Price $12.00.

Sir William Osler Aphorisms. From His Bedside Teachings and Writings. Collected by Robert Bennett Bean, M.D. (1874-1944). Edited by William Bennett Bean, M.D. 164 pp. Charles C Thomas, Springfield, Ill. Price $4.00.

Bio-Assay Techniques for Human Centrifuges and Physiological Effects of Acceleration. AGARDograph 48. Edited by P. Bergeret. 23 contributors. 176 pp., illust. Pergamon Press, New York. Price $10.00.

Immunity. 2nd Ed. By Sidney Raffel, Sc.D., M.D. 646 pp., illust. Appleton-Century-Crofts, Inc., New York. Price $10.00.

Clinical Obstetrics. By Benjamin Tenney, M.D. and Brian Little, M.D., F.R.C.S. (C). 440 pp., illust. W. B. Saunders Company, Philadelphia, London. Price $8.50.

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ADDRESS: Send manuscripts to the Editor, MILITARY MEDICINE, Suite 718, 1726 Eye Street, N.W., Washington 6, D.C.

Escape and Survival: Clinical and Biological Problems in Aero Space Medicine. AGARDograph No. 52. Edited by P. Bergeret. 117 pp. Pergamon Press, New York. Price $6.50.

A Manual of Neurology and Psychiatry in Occupational Medicine. By Ralph T. Collins, A.B., M.D., Med.Sc.D. With Foreword by William A. Sawyer, M.D., and James H. Sterner, M.D. 244 pp., illust. Grune & Stratton, New York, London. Price $6.50.

Ciba Foundation Symposium. *Somatic Stability in the Newly Born.* Editors: G. E. W. Wolstenholme, O.B.E., M.A., M.B., M.R.C.P. and Maeve O'Connor, B.A. 393 pp., illust. Little, Brown and Company, Boston. Price $10.00.

Uveitis and Toxoplasmosis. By E. S. Perkins, Ph.D. (Lond.), M.D. (Lond.), F.R.C.S. (Eng.). 142 pp., illust., 8 in color. Little, Brown and Company, Boston. Price $8.00.

Manual of Refraction. By Albert E. Sloane, M.D. 171 pp., illust. Little, Brown and Company, Boston. Price $6.50.

Gravitational Stress in Aerospace Medicine. Sponsored by the Aerospace Medical Laboratory, Wright-Patterson Air Force Base, Ohio. Edited by Otto H. Gauer, M.D. and George D. Zuidema, M.D. 278 pp., illust. Little, Brown and Company, Boston. Price $13.50.

Gynecologic Endrocrinology. By Edward A. Graber, M.D. 218 pp. J. B. Lippincott Company, Philadelphia, Montreal. Price $7.50.

Differentiation Between Normal and Abnormal in Electrocardiography. By Ernst Simonson, M.D. With Foreword by Charles E. Kossmann, M.D. 328 pp., illust. The C. V. Mosby Company, St. Louis. Price $13.50.

The Art of Thinking. By Dagobert D. Runes. 90 pp. Philosophical Library, Inc., New York. Price $2.75.

Unit-Step Radiography. Simplification of Medical Radiography Through Manual and Automatic Use of an Exposure Value Scale (XVS) System and Standardization. By Gerhart S. Schwarz, M.D. 230 pp., illust. Charles C Thomas, Springfield, Ill. Price $8.75.

Psychiatry. Biological and Social. By Ian Gregory, M.A., M.D., (Camb.), D.Psych. (Tor.), M.P.H. (Mich.). 577 pp. W. B. Saunders Company, Philadelphia, London. Price $10.00.

Disturbances of Heart Rate, Rhythm and Conduction. By Eliot Corday, M.D., F.A.C.P., F.A.C.C. and David W. Irving, M.D. 357 pp., illust. W. B. Saunders Company, Philadelphia, London. Price $8.50.

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The perpetuation of any organization depends on adding new members to its rolls. We therefore, ask your assistance in letting others, who are eligible, know about our Association. Become an Honor Roll Member by signing up a new member.

BOOK REVIEWS

RECENT ADVANCES IN HUMAN NUTRITION. With special reference to Clinical Medicine. By J. F. Brock, D.M., F.R.C.P. and invited contributors. 454 pp. Little, Brown and Company, Boston. Price $11.50.

Proper nutrition is of such obvious importance in the medical field that it is not necessary to belabor the point. The science of nutrition, however, covers such a broad area that it is difficult to condense the known facts into a concise, understandable treatise which will be of value to those wishing to keep abreast with current trends and subjects being investigated throughout the world. This volume, which was prepared especially for the information of medical practitioners who are interested in the relevance of nutrition to medical practice, is a victim of this difficulty but presents a number of subjects certain to be of value to busy clinicians.

About ⅓ of the text is devoted to general reviews covering the major dietary components, vitamins, minerals, etc. Only brief mention is made of each vitamin or mineral and the reader will have to refer to other references for comprehensive accounts of these substances.

The remainder of the volume consists of short invited contributions on a wide variety of subjects including: dietary fats, abnormalities of fluid and electrolyte metabolism, bacterial symbiosis, protein malnutrition, trends in infant nutrition, effects of altered nutrition on the skeletal system, nutrition in old age, effects of altered nutrition on the function of the endocrine glands, protein values of human foods, nutrition and infection, cardiopathy of unknown origin in Africa and nutritional anemia. Other chapters are presented on nutrition research in Spanish-Portuguese speaking countries, trends in nutrition in the French speaking countries, and human nutrition and the United Nations agencies.

ROBERT VAN REEN, Ph.D.

BLOOD DISEASES OF INFANCY AND CHILDHOOD. By Carl H. Smith, M.A., M.D. 572 pp., illust. The C. V. Mosby Company, St. Louis. Price $17.00.

Dr. Carl H. Smith is well known for his contributions in pediatric hematology, notably on acute infectious lymphocytosis and thalassemia. He has attempted in his book to present concisely the essential facts about blood diseases in children. The salient features of blood dyscrasias are related to the background of normal growth and development. His book is directed at the medical student and the practitioner. It does not attempt to be encyclopedic but is intended as a companion volume to standard hematology texts.

As he points out, the approach to diagnosis may be complicated in the young. Certain disorders occur almost exclusively in early life. There have been new applications of the rapid advances in immunohematology, knowledge of blood clotting and understanding of hemolytic anemias. These considerations justify this new look at pediatric hematology, if justification is needed.

Dr. Smith emphasizes clinical diagnosis. No laboratory methods are detailed, but it is implied that the physician will have at his disposal a complete hematologic resource. The pathogenesis of each illness, as it is presently understood, is the rational basis for the therapeutic regimens described.

Embryology of the blood is the opening topic. There are discussions of the blood changes during growth, the normal conditions of hematopoietic organs and the cells, platelets and clotting factors produced. Certain blood dyscrasias are related to interactions between mother and fetus. Erythroblastosis fetalis and the intriguing problem of differentiating jaundice in the newborn are presented in adjacent chapters. Strategically placed nearby is a section on transfusions in pediatric practice.

A strong segment of the book is that on anemias. Those parts on leukemia and coagulation disorders are also very good. The treatment of childhood leukemia is particularly well handled.

The book is not an atlas. There are 51 black and white illustrations carefully chosen to demonstrate particular points. A sprinkling of useful charts and tables amplifies the text.

Dr. Smith writes in a tight, declarative style. His text is usually crystal clear, well-organized and meaty. His information is up to the minute and presented with authority. An extensive bibliography follows each chapter providing an entree into the literature for anyone caring to pursue a subject deeper. There are also author and subject indices which cross-reference the book thoroughly.

A recurring dogmatic statement (pgs. 219, 437) that the shape of spherocytes renders them susceptible to trapping by the spleen ought to be modified. This long-standing hypothesis is presently being attacked experimentally with some success. Also there is an occasional carelessly written sentence such as that on page 95 which implies that the genetic defect in galactosemia is correctible, or that on page 388 which relates mongolism to "toxic factors." A

few subjects are treated rather superficially, perhaps by design. But these are minor complaints about an otherwise excellent book.

Pediatricians, whether in training or in practice, will welcome this book. They will particularly refer to it for details of treatment or management. Hematologists, pathologists, internists, general practitioners and medical students may all profit from a look between these covers.

MAJ. EDWARD J. TOMSOVIC, MC, USA

ANATOMY OF THE EYE AND ORBIT (Eugene Wolff's). 5th Ed. Revised by R. J. Last, M.B., B.S., F.R.C.S. 500 pp., 438 illust. (54 in color). W. B. Saunders Company, Philadelphia and London. Price $18.00.

R. J. Last had the melancholy pleasure of finishing the fifth edition of Eugene Wolff's *Anatomy of the Eye and Orbit*. When it was proposed that a fifth edition be written, some wondered what could be added to the fourth.

This edition has the following features: (1) The description of the orbital bones and illustrations of the bones of the orbit which, from the standpoint of the student who is mastering the osteology of the orbit, is superior. (2) Although little could be added to the gross description of the eyeball and the adnexa this presentation is excellent. (3) Electron microscopy has added tremendously to our knowledge of the details of the finer structure of the eyes. (4) The cornea and anterior third of the vitreous as well as the iris are described in detail as seen with the slit lamp in a special chapter. (5) In the chapter on nerves several valuable features are noted: (a) contrasting points of the cranial nerves are emphasized for the benefit of the learner, (b) a few paragraphs entitled "Practical Consideration," point out the effects of anatomic changes. (6) The chapter on the visual pathways correlates the anatomy with new facts of physiology recently discovered. (7) The portion of the book that describes the development of the eye contains a section entitled "Principal Landmarks in Ocular Growth." This describes the changes of greatest moment in the production of developmental abnormalities. This is for the purpose of informing us of the latest research work in embryology of the eye, and demonstrates the practical considerations of this new knowledge. (8) The closing chapter entitled "Comparative Anatomy" is written in a practical rather than an academic style.

The entire tone of the book has the following characteristics: (a) It teaches the facts of anatomy in a superior manner; (b) use is made of all of the latest discoveries of research; (c) it presents the practical face of the subject.

This book is recommended primarily for those who are studying the subject for the first time, and those who wish to read about recent progress. This textbook will interest the medical student, the physician, the anatomist, the ophthalmologist, and the research biologist.

COL. ROLAND I. PRITIKIN, MC, USAR

FOURTH NATIONAL CANCER CONFERENCE PROCEEDINGS. 1960. Held at the University of Minnesota, Sept. 13-15, 1960. Sponsored by American Cancer Society, Inc., and National Cancer Institute, USPHS. 774 pp. J. B. Lippincott Company, Philadelphia and Montreal. Price $9.00.

The program of this conference comprised four general sessions, ten panel sessions, a clinicopathologic conference and a summary session. The topics of the general sessions were "Cancer Etiology," "Cancer Pathogenesis and Spread," "Cancer in the World Around Us" and "Cancer Therapy." The session on "Cancer in the World Around Us" included discussions of tobacco smoking, industrial carcinogens, air pollution and cancer, food additives and contaminants and radiation hazards.

The panel sessions were devoted to cancers of specific sites such as the breast, lung, female genital tract, etc., and included discussion of etiology, prevention diagnosis and treatment.

In all there are in this volume about one hundred papers covering all phases of the cancer problems and written by recognized authorities in their respective fields. Most of the authors are from the United States but England, Denmark and Canada are also represented. A few topics might be mentioned to give some idea of the scope of the conference: "Chemical, Physical and Viral Carcinogenesis," "The Genetic Concept of the Etiology of Cancer," "Food Additives and Contaminants," "The Treatment of Cancer Patients with Immune Technics," "Primary Treatment for Operable Breast Cancer," "Epidemiology and Etiology of Leukemias and Lymphomas," "In-Vivo Radioautography in the Recognition of Gastric Cancer," "Surgical Treatment of Bladder Cancer." One panel discussion was devoted to the subject of cancer control measures in public health programs.

Any one interested in any phase of the cancer problem will find this book well worthwhile. It presents the latest thinking on the many facets of neoplastic disease.

COL. HUGH R. GILMORE, USA, Ret.

CALDERWOOD'S ORTHOPEDIC NURSING. 5th Ed. By Carroll B. Larson, M.D., F.A.C.S., and Marjorie Gould, R.N., B.S., M.S. 547 pp., 343 illust. The C. V. Mosby Company, St. Louis. Price $6.50.

This is the fifth edition of the book on orthopedic nursing in which current information is incorporated and the nurse instructed on how to manage herself as well as the patient. It is well organized by subjects, written in an easy to read manner. The authors have done a fine job of presenting the or-

thopedic conditions followed by the nursing care for each condition. Each unit is followed by questions for study and a very adequate list of references. The text is amply augmented with excellent illustrations. A chapter on the medicolegal aspects of nursing has been added in this edition.

This book is highly recommended not only for nurses taking care of orthopedic patients, but for all nurses and students because the principles of care apply equally as well to all patients.

COL. JOSEPH W. BATCH, MC, USA

NEUROVASCULAR COMPRESSION SYNDROMES OF THE SHOULDER GIRDLE. By Louis M. Rosati, M.D., and Jere W. Lord, M.D. 168 pp., illust. Grune & Stratton, New York and London. Price $7.50.

Pain, paresthesias and vascular symptoms in the upper extremities often pose perplexing problems in diagnoses and treatment. This monograph offers good direction in the solution of such difficulties. Particularly commendable is the chapter on diagnosis and the chapter on differential diagnosis. There is also a very fine elucidation of the anatomical structure involved including the brachial plexus. The authors dwell at length on the scalenus anticus, costoclavicular and hyperabduction syndromes as well as combined syndromes of these entities. Their case reports are exceptionally interesting and serve as teaching models. The book is concluded with a table summarizing the case histories of 51 patients. Although the authors are surgeons they stress the conservative approach as well as describing the necessary surgery. There are ample illustrations and the book is recommended for those with genuine interest in the subject.

LT. COL. ARTHUR J. LEVENS, MC, USA

ORTHOPAEDIC APPROACHES. A Stereographic Manual. Section I: Lower Extremity (Reels 1 to 18). By John J. Joyce, III, M.D., B.A., and Michael Harty, M.A., M.B., M.Ch., F.R.C.S., (Eng.) 80 pp., illust. The Williams and Wilkins Company, Baltimore. Price $28.00.

This book represents quite an advance over previous textbooks concerning this subject. It shows what is done. The anatomic relations are there to be seen. The slides are all in color and in stereo so that if one goes through the slides, it is almost like one is present at the actual operation. The busy surgeon can quickly review the operative procedures just as he would see it in the operating room. Needless to say, this is a terrific advantage for the student, the intern and the resident.

This volume deals with exposures of the lower extremity from the hip, femur, thigh, tibia, leg, ankle to the foot.

There is an interesting introduction. The use of stereography in medicine is presented. The general principles of orthopaedic surgery are outlined. In each approach, the indication, the limitation, the position of the patient, illustration of draping, the landmarks, the guide posts and above all, the danger points are brought out. There is also a description in the print regarding full outline of each procedure. Each view in each reel has a descriptive paragraph so that the book is abundantly clear. The illustrations are beautifully done. This work is highly recommended for all of those who must do orthopaedic approaches to the lower extremity.

W. COMPERE BASOM, M.D.

A MANUAL FOR NUCLEAR MEDICINE. By Captain E. R. King, MC, USN, and Lieutenant T. G. Mitchell, MSC, USN. 406 pp. Charles C Thomas, Springfield. Price $13.50.

Over the past decade many useful clinical applications of radio-active isotopes have been described by a wide number of investigators. This text serves the very valuable function of gathering together in one source all the latest information on these procedures so that both the novice and the expert can profit by having it available for immediate reference.

The authors present the details of the procedures they have used in their laboratory and the clarity of the presentation makes the text helpful for use as a laboratory training manual. Undoubtedly, other clinics use procedures that differ and interpret their results differently but these are relatively minor criticisms.

The 26 experiments detailed in the last third of the book cover the principles and techniques that are vital to the vigorous and successful operation of a radioisotope clinic. Much time can be saved by having novices pursue these experiments, within the equipment limitations of the specific laboratory, many of which are not as well equipped as that of the authors.

This manual should be in the reference library of every radioisotope clinic. Physicians and others interested in this aspect of nuclear medicine would do well to have this book in their library.

MAJOR MICHAEL P. DACQUISTO, MC, USA

THE ADOLESCENT SOCIETY. The Social Life of the Teenager and Its Impact on Education. By James S. Coleman, Johns Hopkins University; with assistance of John W. C. Johnstone and Kurt Jonassohn. The Free Press of Glencoe, New York. Price $6.95.

This is a study of the adolescent, his problems and some of his adjustments. An important point made, and which we all know is true, is that "adolescents as a whole are *not* delinquent."

Ten schools were studied in different parts of the country. Some of the problems considered which might be placed in question form are: what value do the adolescents place on the opinion of their par-

ents, their friends, and their teachers? Can everyone be regimented; if so should everyone be regimented; what effect would this have on the future value of the adolescent to society? What are we going to do with those who cannot absorb all the education many educators feel an individual should have? What are some of the solutions to the problems of the adolescent as he believes are solutions?

In this book those dealing with adolescents will find a great amount of valuable information which will give a good insight into the social sphere of these future citizens.

R.E.B.

THE COUCH AND THE CIRCLE. A Story of Group Psychotherapy. By Hyman Spotnitz, M.D., Med. Sc.D. 274 pp. Alfred A. Knopf, Inc., New York, N.Y. Price $4.50.

A psychiatrist tells how troubled people help and heal each other and themselves through group psychotherapy.

The author, in a lucid style, gives an enlightening account of his experiments with a newly developing form of psychotherapy—group psychotherapy, which has come to be regarded as the most helpful form of treatment for thousands. He tells the story of how group therapy works and succeeds, through his own experience.

Patients need help in managing transference feelings and the guilt and anxiety connected with them. The psychiatrist gives guidance and support and often must accept being a kind of sounding board against which the patient expresses his hostile and aggressive feelings. Dr. Spotnitz reveals that prolonged and close contacts with the group in action can provide healthy examples of mature adults responding well to the various trials of everyday life, and enable a patient to maintain a place for himself in the community.

This book can be recommended to the general public for a general source of information on group psychotherapy.

Dr. Spotnitz is the author or co-author of more than fifty published papers on psychoanalytic psychiatry, group psychotherapy, and neurology. *The Couch and the Circle* is his first book, although he has contributed chapters on group therapy to various professional books, including *Specialized Techniques in Psychotherapy* (1952) and *The Practice of Group Therapy* (1947).

S.E.H.

ESSENTIAL HYPERTENSION. An International Symposium. Berne, June 7-10, 1960. Sponsored by Ciba, edited by K. D. Bock, Basle and P. T. Cottier, Berne. 392 pp., 81 figs. Springer-Verlag, Berlin, Göttingen, Heidelberg. Price not stated.

One of the more pleasurable experiences of the faithful student of medical literature is the occasional encounter with a publication of unusual depth and significance. It would seem that this International Symposium, inspired and financed by the Ciba Foundation and convened in June, 1960 at Berne, would fit this rare category. Here were gathered 38 international experts on hypertension from 12 countries (7 from the United States) for exchange of data and ideas.

From the introductory survey of the genesis of hypertension by Dr. Irving Page to the concluding summary by the host, Dr. F. C. Reubi, this book arrests the interest and challenges the imagination of the reader. The entire saga of hypertension is unfolded in a series of comprehensive papers which explore every aspect of the disease. Sections include: mechanisms of pathogenesis; the physiology and clinical evaluation of drugs; the status of sympathectomy and adrenalectomy; the associated complications of long-term hypertension. Throughout the paper, one is afforded a rare insight into the areas of laboratory and clinical research in hypertension.

Despite the excellence of individual papers, they are rather stylized in their objective scientific reporting. In pleasant contrast, the most heat and light is generated in the spirited discussions that follow each section. One of the more fascinating debates is the scholarly donnybrook on the matter of defining essential hypertension. One could not hope to closet such personalities as Drs. Pickering, Peart, Goldblatt, Grollman, Schroeder, and others and not provoke an animated and illuminating discussion.

Of particular interest to the practicing physician are the sections on mechanisms of drug action. A remarkably clear and authoritative paper by Dr. Edward Fries on the saluretic phenomenon induced by chlorothiazide highlights this panel. The pharmacology of newer antihypertensive agents (chlorisondamine, mecamylamine, pempidine, nepresol, syringopine, guanethidine, bretylium) is discussed by Dr. A. J. Plummer.

The concluding sections are concerned with the late effects of drug therapy and the "complications" of hypertension. The discussion is concerned with the relationship of hypertension and degenerative vascular disease, including atherosclerosis.

It is safe to predict that this brilliant symposium will become a well-thumbed member of medical libraries throughout the world. It is a concise recording of contemporary thought on hypertension. It will be read by the student of physiology and pharmacology; and should be studied by the alert practitioner who desires to bring the full impact of current medical knowledge to bear upon the problem of hypertension. It is in this area that the hard-fought battles of laboratory and clinic will be consolidated and achieve their ultimate goal.

LT. COL. ROBT. H. MOSER, MC, USA

BOOK REVIEWS

MANSON'S TROPICAL DISEASES. 15th Ed. Edited by Sir Philip H. Manson-Bahr, C.M.G., D.S.O., M.A., M.D., D.T.M., F.R.C.P. 1117 pp., illust. The Williams & Wilkins Co., Baltimore, exclusive U. S. agents. Price $15.00.

A profusely illustrated, comprehensive reference book on Tropical Medicine that should be in every library and on the bookshelf of every physician who sees patients from tropical areas. Unfortunately, no references are listed. The British maintain that emetine is still a most effective and safe drug for the initial therapy of amebic dysentery or amebic liver abscess. With this statement the reviewer personally concurs, although many authorities in the United States of America feel that emetine's toxicity precludes its use.

BRIG. GEN. ROBERT E. BLOUNT, MC, USA

THE PRACTITIONER'S HANDBOOK. Edited by William A. R. Thomson, M.D. Many contributors. 711 pp. J. B. Lippincott Company, Philadelphia. Price $12.50.

After World War II the editors of "The Practitioner" in London saw the need for a refresher series in Obstetrics and Gynecology and in Pediatrics for the demobilizing physicians who were returning to general practice. The importance and value of papers was recognized.

Finally, this book was compiled through contributions by over 200 prominent specialists in Medical Schools and teaching Hospitals of the United Kingdom.

This reference book for general practitioners covers diagnostic and therapeutic problems encountered in office practice from "time of conception through old age." The organization of material is rather loose and incoherent and for that reason the editor indicates the necessity of using the 28-page, double-column index to locate disorders, symptoms, or other medical data in which the doctor may be interested. The sequence of section headings varies from "Treatment of Incontinence in Elderly," "Anthrax," "Actinomycosis," "Trichinosis," "Psittacosis" to "Diagnostic Significance of Cyanosis," "Differential Diagnosis of Glycosuria" to "Torticollis" and "Burning Feet Syndrome." The individual chapters, however, are clearly and comprehensively written.

This generally excellent English book includes terms that are rather strange to doctors in the United States. Linctuses are described as cough syrups; trade names of medications may be unfamiliar. Large scale use of BCG vaccination in tuberculin negative persons is advocated—reporting up to 81% protection and only rare complication—lymphatic—3 to 12 months after intradermal inoculation.

Special pleas are made for eliminating use of the bedpan and substituting the "sanitary chair" for the great majority of the bed patients. The bedpan is despised by patients and nursing attendants.

In summary this is a worthwhile book for any general practitioner of medicine, including those dealing with obstetrical and pediatric cases.

COL. U. ROBERT MERIKANGAS, USA, RET.

CLINICAL DIAGNOSIS BY LABORATORY EXAMINATIONS. 3rd Ed. By John A. Kolmer, M.S., M.D., Dr. P.H., Sc.D., LL.D., F.A.C.P., F.A.C.D. 543 pp. Appleton-Century-Crofts, Inc., New York. Price $10.00.

This edition by Dr. John A. Kolmer, long a respected proponent of the use of laboratory examinations in aiding clinical diagnosis and guiding therapy, is a tremendous source of correlative information. As Dr. Kolmer states in the preface, this text has been designed for the widest usage, to aid the medical and dental professions in general, the clinical pathologist and the medical technologist. It is a perfect book for both the specialist and generalist who wishes a ready desk reference to the clinical significance of abnormal deviations in the entire range of clinical pathology procedures. The large number of diagnostic tables and summaries cover the widest of differential diagnostic possibilities; these seem most applicable to the internist who is attempting to pin-point an obscure diagnosis. I have already found it to be quite useful as a reference book for students in the School of Medical Technology.

This is not a book of detailed technical procedures and, therefore, should not be confused with *Approved Laboratory Technic* by Kolmer et al. A scattering of procedures are outlined primarily from the standpoint of steps applicable to the preparation and handling of the patient for performance of the Thorn test, duodenal-biliary drainage, etc. There are 16 pictorial illustrations, most of them in black and white. Among the 22 chapters there is coverage of clinicopathologic interpretations of hematologic, urine, blood chemistry, hormone, vitamin, and toxicologic examinations. There is an excellent chapter on function tests of the various organs. A number of

chapters deal with the study of body fluids, secretions and excretions. The collection of specimens is stressed in the chapter on clinical interpretation of bacterial and fungal cultures, and parasite studies. Other chapters include evaluation of blood grouping and immunohematologic examinations as well as the clinical aspects of immunologic skin tests.

Dr. Kolmer has concentrated much in the chapter headed "Serologic Examinations in Infectious Diseases." The review of serologic studies in lues, including current sensitivity and specificity comparisons of the TPI, TPCF and RPCF tests, is as commendable as one would expect in view of Dr. Kolmer's long investigative experience with the serologic diagnosis of syphilis.

This edition rates the highest recommendation, especially to the clinical pathologist, to the internist and to teachers in Schools of Medical Technology. In fact, it will appeal to and be of value for that portion of professional make-up in every practicing physician and dentist that is at all "clinical pathology-like."

ROBERT F. DILLON, M.D.

MANAGEMENT OF MEDICAL EMERGENCIES. Edited by John C. Sharpe, M.D., 19 contributors. 354 pp. McGraw-Hill Book Company, Inc., New York, Toronto, London. Price $9.75.

The material in this book is from the postgraduate symposia offered by the Division of Continuing Education in Medicine and Health Sciences at the University of California (Los Angeles) School of Medicine.

The book is meant to give as much information as possible in a concise manner, setting down in 1, 2, 3, 4 order "What to Look For," "What to Do," "What Not to Do," and "What to Expect."

The 21 chapters are grouped under "Neurologic Disorders," "Cardiac Disorders," "Abdominal Disorders," "Pulmonary Disorders," and "Metabolic Disorders." At the end of each chapter there is a short discussion and a limited bibliography. There is, of course, a good index.

This book is needed in these days of so many emergencies.

A.J.B.

PSYCHOPHYSIOLOGICAL ASPECTS OF SPACE FLIGHT. A Symposium. Edited by Bernard E. Flaherty, Lt. Col., USAF, MC. 393 pp. Columbia University Press, New York. Price $10.00.

This comprehensive compendium is the report of an important symposium conducted at the School of Aviation Medicine, USAF Aerospace Medical Center, Brooks Air Force Base, Texas, in May, 1960.

The book is well written and easily read considering the highly technical nature of its contents. It is organized logically into four parts presenting successively (1) Technical background and experience; (2) Critical problem areas; (3) Problems of human reliability and (4) Special techniques of control. Each separate topic within these four parts is followed by a detailed bibliography for those who desire further information.The text is well illustrated with tables, figures and photographs.

The book amply documents the fact that we know far more about maintaining a man alive in space for short periods of time, than we do about his behavioral characteristics under the conditions of space travel. The several major problems expected are outlined and possible courses of action to resolve them are presented. The symposium is a prime example of the multidisciplined approach that is required, and is being applied, to the solution of bioastranautic problems.

The research reported in this symposium has wide implications in the fields of medicine, biology, psychiatry, and engineering. While the book is of primary interest to scientists engaged in the national effort to place man in space, it is extremely timely, and merits scanning by all members of the various professions involved. This volume takes time to read, but the information is well worth the effort.

COL. SPURGEON NEEL, MC, USA

HISTOLOGY. 4th Ed. By Arthur W. Ham, M.B., F.R.S.C., and Thomas Sydney Leeson, M.A., M.D., B.Ch. (Cantab.) 942 pp., 589 figs., 8 plates in color. J. B. Lippincott Company, Philadelphia and Montreal. Price $11.00.

This edition includes all the fundamentals of histology that were present in the three previous editions and also includes all the latest research and innovations in this particular field which have taken place in the past several years. The importance to histology of physics and biochemistry is apparent throughout the entire volume. The importance of electron microscopy, interference, phase and fluorescence microscopy and microspectrophotometry as it relates to the subject of histology is prevalent throughout the entire book. It also demonstrates facts and anatomy, that were only vague and not demonstrable in the past decade, to be clearly vivid because of the latest innovations. Although all these new facets which make histology more understanding have been interpreted, the basic concept of this book, which is to explain the subject of histology in a simple, clear and interesting manner is still maintained, and the importance and significance of histology as it relates to other fields of anatomy is also still maintained.

I highly recommend this textbook of histology for every teaching institution.

CAPT. J. F. MCCABE, MC, USN

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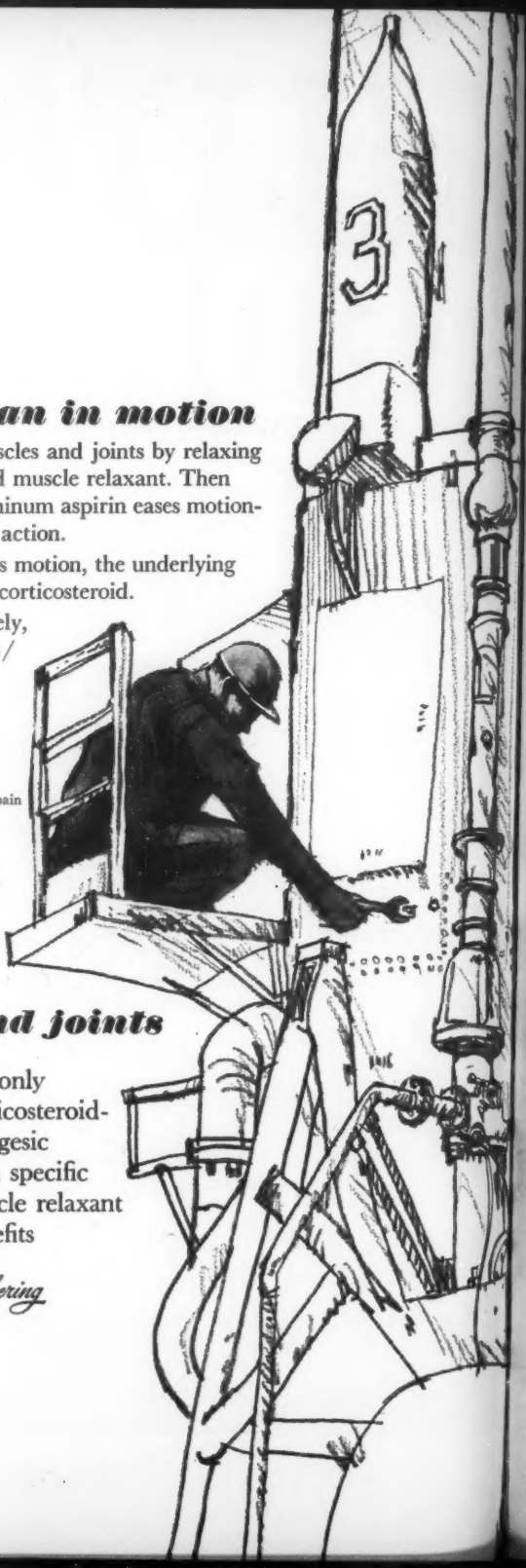

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1. Ernst, E. M.: *Pennsylvania M.J. 63*:708 (May) 1960.
2. Settel, E.: *Clin. Med. 7*:1835 (Sept.) 1960.

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In a series of 24 handicapped arthritics treated with dexamethasone for 8 to 16 months, ring size decreased consistently—objective evidence of antirheumatic effects which were maintained throughout the entire period of observation. Improvement was also noted in other antirheumatic indices, i. e., pain on motion, tenderness, swelling and morning stiffness.[1]

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Reference: 1. Bunim, J. J., in Hollander, J. L.: Arthritis and Allied Conditions, ed. 6, Philadelphia, Lea & Febiger, 1960, p. 364.

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Administration and Dosage: For topical anesthesia, Xylocaine HCl 4% may be applied as a spray or with cotton applicators or packs, and by instillation into a cavity. The suggested volume ranges, for adults, from one to five cc. (40-200 mg.). For children, debilitated and aged patients, dosages should be proportionately reduced. Prior to removal of foreign bodies from the eye, examination of corneal lacerations, cauterization of corneal ulcers, and other surgical and diagnostic procedures, 2 to 3 drops of Xylocaine HCl 4% will usually produce adequate anesthesia. *How Supplied:* For Transtracheal and Retrobulbar Injection and Topical Application–Sterile aqueous solution dispensed in 5 cc. color-break ampules, packed 10 ampules to a carton. For Topical Use Only–Aqueous solution in 50 cc. screw cap bottles, individually cartoned.

*U. S. Patent No. 2,441,498 Made in U. S. A

Astra Pharmaceutical Products, Inc., Worcester 6, Mass.

in cellulitis... your complete therapy now should include

VARIDASE®

STREPTOKINASE-STREPTODORNASE LEDERLE

buccal tablets

to shorten recovery time/provide a smoother convalescence

VARIDASE reduces inflammation, swelling, and pain by stimulating early fibrinolysis—medication and natural regenerative factors readily penetrate the site to accelerate the healing process. A more comfortable convalescence, with a more rapid return to normal activities, is the result.

Precautions: VARIDASE has no adverse effect on normal blood clotting. Care should be taken in patients on anticoagulants or with a deficient coagulation mechanism. When infection is present, VARIDASE Buccal Tablets should be given in conjunction with antibiotics.

Dosage: One buccal tablet four times daily usually for five days. To facilitate absorption, patient should delay swallowing saliva.

Supplied: Each tablet contains 10,000 Units Streptokinase, 2,500 Units Streptodornase. Boxes of 24 and 100 Tablets.

LEDERLE LABORATORIES, a Division of AMERICAN CYANAMID COMPANY, Pearl River, New York

VARIDASE (Streptokinase-Streptodornase Lederle)
Available as Federal Stock Number FSN 6505-660-0059

new definitive medication for the prevention and treatment of urethral strictures

Furacin®-HC Urethral Suppositories

Roll and Waller have reported on the use of these suppositories following transurethral resection in 35 patients; 30 were followed from one to six months. Excellent results were obtained, with rapid relief of symptoms, freedom from side effects and no development of urethral strictures.

"We feel the good results are due to three functions performed by the suppositories. First of all, they mechanically dilate the urethra and cover the raw mucosal surfaces. Secondly, they combat infection and thus inflammation. Thirdly, the hydrocortisone directly suppresses inflammation and subsequent fibrosis."[1]

FURACIN-HC Urethral Suppositories combine the potent antibacterial action of FURACIN with the anti-inflammatory effect of hydrocortisone and prompt local anesthetic action of diperodon—plus gentle dilation.

Prevention of urethral strictures: postinstrumentation as in transurethral resection; postcatheterization ■ treatment of urethral strictures ■ treatment of urethral inflammation primary and secondary to infection and trauma ■ treatment of posterior urethritis and trigonitis in women

FURACIN-HC Urethral Suppositories—Box of 12, 1.3 Gm. each, hermetically sealed in aluminum foil. Each suppository contains FURACIN (brand of nitrofurazone) 0.2%, hydrocortisone acetate 1% and diperodon hydrochloride 2% in a water-dispersible base.

1. Roll, W. A., and Waller, J. I.: J. Urol., Balt. 81:289, 1959.

EATON LABORATORIES, Division of The Norwich Pharmacal Company, NORWICH, NEW YORK

Available on Federal Supply Contract #GS-00S-33047

Low-back patient and muscle back in action

Prompt relief... early recovery—In low-back cases, or for patients with inflammatory or traumatic musculoskeletal complaints, RELA offers the promise of prompt relief and early recovery. In a study[1] of 212 conservatively treated low-back patients, 106 treated also with carisoprodol [RELA] were 'back in action' in one-fourth the time it took the conventionally treated group. RELA speeds recovery by a combination of effects—analgesic and muscle relaxant—to reduce spasm and tension, relieve pain, restore mobility. Undesirable effects have been minimal.

SUPPLIED: Bottles of 30, 350 mg. tablets. **REFERENCE:** 1. Kestler, O. C.: J.A.M.A. 172:2039 (April 30) 1960. **For complete details, consult latest Schering literature available from your Schering Representative or the Medical Services Dept., Schering Corporation, Bloomfield, New Jersey.**

H-406

RELA®

brand of carisoprodol

Schering

because patients are more than asthmatic lungs...

controlling inflammatory symptoms is frequently not enough!

Even cortisone, with its severe hormonal reactions, can effectively control inflammatory symptoms in bronchial asthma. But a patient is more than the sum of his parts – and the lung is only part of a whole patient. Symptomatic control is but one aspect of modern corticotherapy, because what is good for the symptom may also be bad for the patient.

Unsurpassed "General Purpose" and "Special Purpose" Corticosteroid...
Outstanding for Short- and Long-Term Therapy

Aristocort®

Triamcinolone Lederle

(Cross-section of asthmatic bronchiole; lumen filled with exudate)

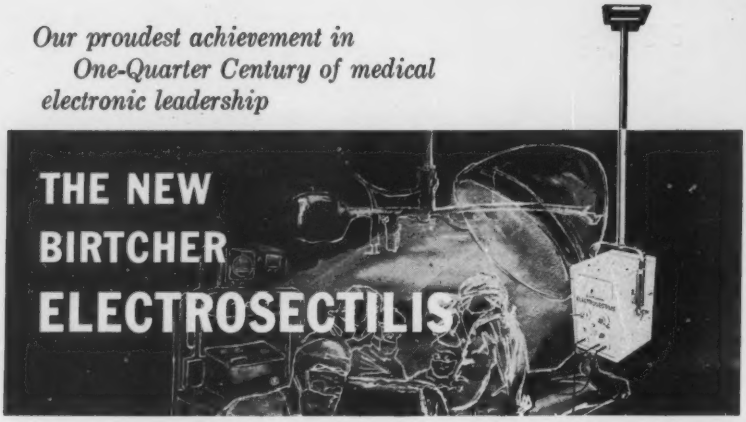
ARISTOCORT is an outstanding "special purpose" steroid when the complicating problem is increased appetite and weight gain, sodium retention and edema, cardiac disease, hypertension or emotional disturbance and insomnia.

ARISTOCORT provides unsurpassed anti-inflammatory control without sodium retention or edema – without undesirable psychic stimulation and voracious appetite.

Supplied: Scored tablets (three strengths), syrup, parenteral and various topical forms. Request complete information on indications, dosage, precautions and contraindications from your Lederle representative, or write to Medical Advisory Department.

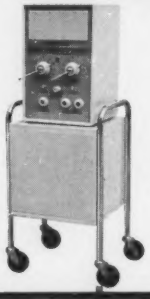
Lederle LEDERLE LABORATORIES • A DIV. OF AMERICAN CYANAMID COMPANY • PEARL RIVER, N. Y.

Our proudest achievement in One-Quarter Century of medical electronic leadership



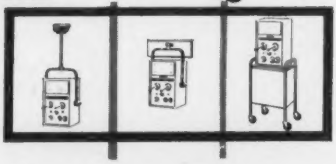
BRILLIANT IN PERFORMANCE with features such as a four tube separately rectified cutting circuit; new damped coagulation circuit for extraordinarily precise coagulation; settings for either circuit separately, with no chance for blend; setting for blend when desired; both visual and audible signals of current selection. ■ **SPACE SAVING COMPACTNESS** to bring new freedom of movement into the surgery. The new **ELECTROSECTILIS** takes up less than ¼ the space and is less than ⅓ the weight of any other major electrosurgical unit! Yet, it provides more power, versatility and exquisite surgical performance than the largest and most expensive. ■ **THE LOWEST PRICE** of any major unit. All of the engineering, manufacturing and actual operating room experience gained in one-quarter century have combined to produce a unit which can be sold at a lower price than any other currently on the market, with such ruggedness and dependability it has a full **FIVE YEAR GUARANTEE.**

THE FIRST NEW ELECTROSURGICAL UNIT IN 15 YEARS



CHOICE OF SPACE-SAVING MOUNTINGS

The new ELECTROSECTILIS can be ceiling mounted with special new mount as shown, or can be used on the compact, mobile, locking sub-cabinet, or can be built-in wall to architect's specification.



FOR DETAILED DESCRIPTIVES PLUS A FULL-SIZE PICTURE OF THE NEW ELECTROSECTILIS WRITE TO MR. DONALD HUNT, ELECTROSURGERY DIVISION MANAGER

THE BIRTCHER CORPORATION Dept. MM1261
4371 Valley Boulevard, Los Angeles 32, California

B

once again, an active hand in "doing"–

PABALATE®

mutually potentiating nonsteroid antirheumatics

"superior to aspirin"[2] and with a "higher 'therapeutic index'"[1]

In each yellow enteric-coated PABALATE *tablet:*

Sodium salicylate (5 gr.) 0.3 Gm.
Sodium para-aminobenzoate (5 gr.) 0.3 Gm.
Ascorbic acid.....50.0 mg.

When sodium should be avoided—

PABALATE®-SODIUM FREE

In each pink enteric-coated PABALATE-SODIUM FREE *tablet:*

Same formula as PABALATE, with sodium salts replaced by potassium salts.

When conservative steroid therapy is indicated—

PABALATE®-HC

Pabalate with Hydrocortisone

In each light blue enteric-coated PABALATE-HC *tablet:*

Same formula as PABALATE-SODIUM FREE, plus hydrocortisone (alcohol) . . . 2.5 mg.

Pabalate tablets available as F.S.N. 6505-660-1746

1. Barden, F. W., et al.: J. Maine M. A. 46:99, 1955.
2. Ford, R. A., and Blanchard, K.: Journal-Lancet 78:185, 1958.

A. H. ROBINS COMPANY, INC., RICHMOND 20, VIRGINIA

Making today's medicines with integrity...seeking tomorrow's with persistence.

Everyday practice report:
Following initial clinical investigational work, Forhistal was sent to physicians throughout the country for evaluation as an antiallergic and antipruritic agent in everyday practice. Results in 4026 cases have now been analyzed. In 2260 cases in which a comparison was made, Forhistal was judged better than previous therapy in 7 out of 10 patients. Information about the investigational work done previously is being mailed to you separately and is also available on request.

SUPPLIED: *Tablets*, 1 mg. (pale orange, scored). *Lontabs*, 2.5 mg. (orange). *Syrup* (pink), containing 1 mg. Forhistal maleate per 5-ml. teaspoon. *Pediatric Drops* (pink), containing 0.5 mg. Forhistal maleate per 0.6 ml.

For complete information about Forhistal (including dosage, cautions, and side effects), see Physicians' Desk Reference or write CIBA, Summit, N. J.

FORHISTAL® maleate
(dimethpyrindene maleate CIBA)
&LONTABS® (long-acting tablets CIBA)

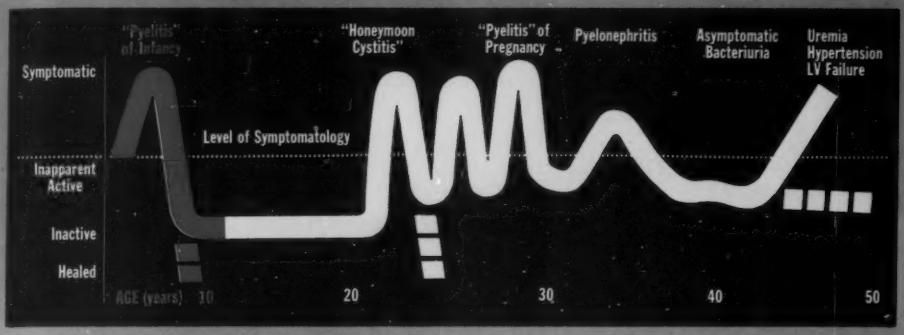
CIBA
SUMMIT, NEW JERSEY

Forhistal®
rated better than previous therapy in 7 cases out of 10

Forhistal Lontabs® for greater convenience, smoother response, prolonged action.

2/2910HK-2

Natural History of Pyelonephritis



"... the theme that runs through the carefully taken history of most uremic patients with chronic pyelonephritis—the burning on urination of infancy, the chills and fever in childhood, the 'honeymoon' pyelitis, the recurrent urethritis treated so well and often locally—and yet the termination in uremia."[1]

in early childhood—"a potentially fatal warning sign"[2]

The *best* opportunity to eradicate urinary tract infection (and prevent potentially disastrous sequelae) is the *first* opportunity—in the infant and young child.

Furadantin—for a "cure" instead of a "chronic"

In children "a prophylactic regimen of therapy is indicated. . . . The therapy could be compared to the prophylactic treatment of patients whose exacerbation of a rheumatic fever has been controlled."[3] "Continuous prophylactic therapy with nitrofurantoin, at present, is our best modality for the treatment of chronic urinary tract infection."[4]

FURADANTIN DOSAGE FOR CHILDREN: Average dose is 5 to 8 mg. per Kg. (2.3 to 3.6 mg. per lb.) in 4 divided doses daily. A prophylactic dosage of from 1 to 5 mg. per Kg. is recommended for long-term use.[3] After the infection has been controlled, urinalysis and culture at least twice a year are suggested.[3]

SUPPLIED: Oral Suspension, 25 mg. per 5 cc. tsp., readily miscible with water, infant formulas, milk or fruit juices. Tablets, 50 mg. and 100 mg.

REFERENCES: 1. Birchall, R.: Am. Practit. *11*:918, 1960. 2. Stevenson, S. S.: J. Louisiana Med. Soc. *110*:219, 1958. 3. Marshall, M., Jr.: J. Kentucky Med. Assoc. *59*:35, 1961. 4. Johnson, S. H., III, and Marshall, M., Jr.: J. Urol. *82*:162, 1959.

Complete information in package insert or on request to the Medical Director.

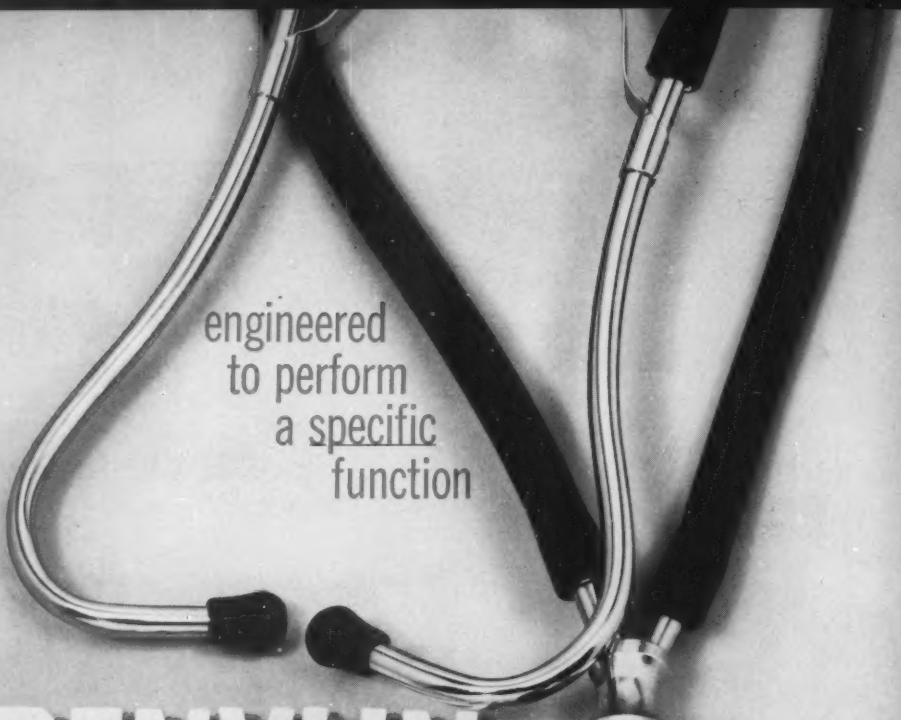
EATON LABORATORIES, Division of The Norwich Pharmacal Company, NORWICH, NEW YORK

To cure or control infection throughout the urinary system at every age of life... at every stage of infection

Furadantin®

brand of nitrofurantoin

Available on Federal Supply Contract #GS-00S-33047



engineered
to perform
a specific
function

BENYLIN EXPECTORANT

specifically designed to help control cough

Just as a medical instrument is engineered for maximum efficiency in performing its specific function, BENYLIN® EXPECTORANT is formulated to provide effective relief of cough associated with colds or allergy.

The outstanding antitussive action of BENYLIN EXPECTORANT is attributed to a combination of carefully selected therapeutic agents. Benadryl,® a potent antihistaminic-antispasmodic, reduces bronchial spasm, quiets the cough reflex, and lessens nasal stuffiness, sneezing, lacrimation, itching, and other allergic manifestations. Concurrent respiratory congestion is relieved by expectorant agents that efficiently break down tenacious mucosal secretions. In addition, a demulcent action soothes irritated throat membranes. 59961

BENYLIN EXPECTORANT is a pleasant-tasting, raspberry-flavored syrup...completely acceptable to patients of all ages.

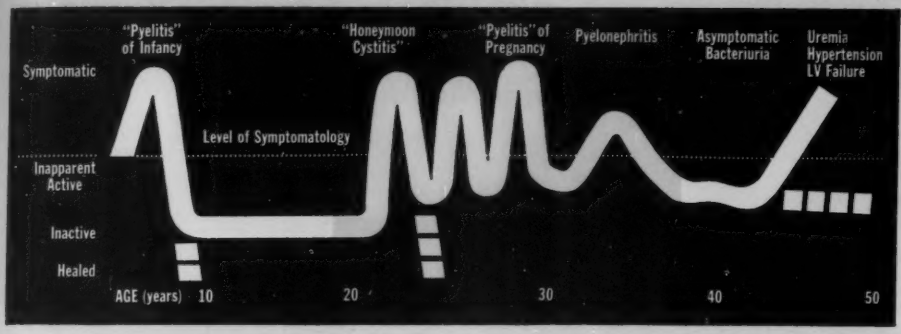
supplied: BENYLIN EXPECTORANT is available in 16-ounce and 1-gallon bottles.

Each fluidounce contains: 80 mg. Benadryl Hydrochloride (diphenhydramine hydrochloride, Parke-Davis); 12 gr. ammonium chloride; 5 gr. sodium citrate; 2 gr. chloroform; 1/10 gr. menthol; and 5% alcohol. *Indications:* Relief of coughs due to colds, other symptoms associated with colds, and coughs of allergic origin. *Dosage:* Adults—1 to 2 teaspoonfuls every three to four hours. Children—½ to 1 teaspoonful every four hours. *Precautions:* Products containing Benadryl should be used cautiously with hypnotics or other sedatives; if atropine-like effects are undesirable; or if the patient engages in activities requiring alertness or rapid, accurate response (such as driving).

PARKE-DAVIS

PARKE, DAVIS & COMPANY, Detroit 32, Michigan

Natural History of Pyelonephritis



". . . the theme that runs through the carefully taken history of most uremic patients with chronic pyelonephritis—the burning on urination of infancy, the chills and fever in childhood, the 'honeymoon' pyelitis, the recurrent urethritis treated so well and often locally—and yet the termination in uremia."[1]

the child-bearing age—a second major stage for urinary tract infection

"The fact that the many cases of chronic and finally, lethal, upper urinary infections in women begin or recur during gestation is especially challenging."[2] "We now believe that all prepartum women should have one quantitative urine culture as part of their medical management."[3]

Furadantin—when pregnancy initiates (or activates) urinary tract infection

In a study of 104 pregnant women with urinary tract infections: "FURADANTIN was highly effective in the treatment of these infections during all stages . . . and frequently offers the best chance of effecting a clinical cure."[4]

FURADANTIN DOSAGE DURING PREGNANCY AND THE PUERPERIUM: The average dose is one 100 mg. tablet 4 times daily, given with meals and with food or milk on retiring, to prevent nausea. For acute, uncomplicated infections, 50 mg. q.i.d. may be administered. If improvement does not occur in 2 or 3 days, increase dosage to 100 mg. q.i.d.

SUPPLIED: Tablets, 50 mg. and 100 mg. Oral Suspension, 25 mg. per 5 cc. tsp.

REFERENCES: 1. Birchall, R.: Am. Practit. *11*:918, 1960. 2. Benson, R. C., and Mitchell, J. C.: Clin. Obstet. Gynec. *1*:97, 1958. 3. Favour, C. B.: Southern Med. J. *54*:848, 1961. 4. Nesbitt, R. E. L., Jr., and Young, J. E.: Obstet. Gynec. (N. Y.) *10*:89, 1957.

Complete information in package insert or on request to the Medical Director.

EATON LABORATORIES, Division of The Norwich Pharmacal Company, NORWICH, NEW YORK

To cure or control infection throughout the urinary system at every age of life... at every stage of infection

Furadantin®

brand of nitrofurantoin

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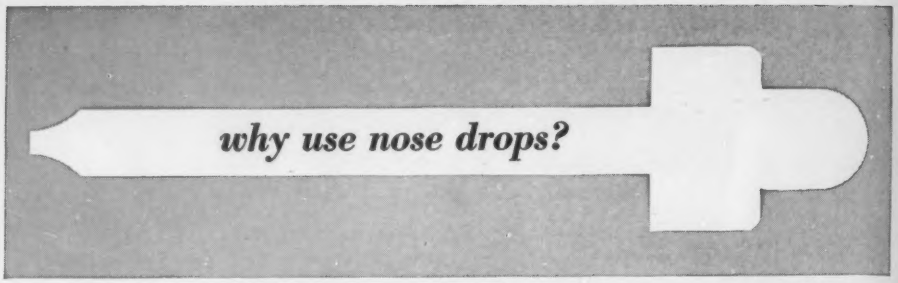


'SUDAFED' acts systemically to relieve stuffy noses . . . and dilate the bronchi.

'SUDAFED'®

brand

Pseudoephedrine Hydrochloride

TABLETS

and SYRUP

for nasal and respiratory decongestion

- **Quick relief — 15 to 30 minutes**
- **Gentle, prolonged action — 4 to 6 hours**
- **Seldom causes central stimulation**

Dosage: adults—60 mg., 3 or 4 times daily
children (4 mos. to 6 yrs.)—30 mg., 3 or 4 times daily
infants up to 4 mos. of age—15 mg., 3 or 4 times daily

Supply: 'SUDAFED' brand Pseudoephedrine Hydrochloride

Tablets—30 mg. sugar-coated, 60 mg. scored

Syrup—30 mg. per 5 cc. teaspoonful

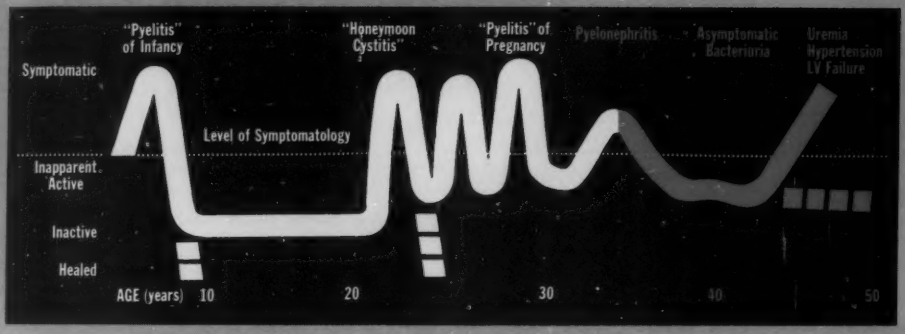
Precaution: Although pseudoephedrine causes virtually no pressor effect in normotensive patients, it should be used with caution in hypertensives.

Complete literature available on request.

Contract No. GS-00S-33025

BURROUGHS WELLCOME & CO. (U.S.A.) INC., Tuckahoe, New York

Natural History of Pyelonephritis



"... the theme that runs through the carefully taken history of most uremic patients with chronic pyelonephritis—the burning on urination of infancy, the chills and fever in childhood, the 'honeymoon' pyelitis, the recurrent urethritis treated so well and often locally—and yet the termination in uremia."[1]

during the middle and later years—relapse, reinfection, renal failure

"... the physician treating a patient with established chronic urinary tract infection faces a grave problem of management."[2]

Furadantin—to preserve function; to prolong life

"... certain patients with renal insufficiency derived measurable benefit from prolonged nitrofurantoin treatment; as infection was suppressed their renal function improved. This effect was sufficiently pronounced to be considered an important component of the management of uremia accompanying chronic pyelonephritis."[2]

FURADANTIN DOSAGE IN LONG-TERM THERAPY: "With normal renal function, the dosage schedule of 50 mg. four times daily in adults gave urinary nitrofurantoin concentrations that usually exceeded 5 mg. per 100 mg. throughout the day. This level was thought to be sufficient, on the basis of bacterial sensitivity determinations."[3] In refractory cases, 100 mg. q.i.d. daily is recommended.

SUPPLIED: Tablets, 50 mg. and 100 mg. Oral Suspension, 25 mg. per 5 cc. tsp.

REFERENCES: 1. Birchall, R.: Am. Practit. *11*:918, 1960. 2. Jawetz, E., et al.: A.M.A. Arch. Intern. Med. *100*:549, 1957. 3. Lippman, R. W., et al.: J. Urol. *80*:77, 1958.

Complete information in package insert or on request to the Medical Director.

EATON LABORATORIES, Division of The Norwich Pharmacal Company, NORWICH, NEW YORK

To cure or control infection throughout the urinary system at every age of life... at every stage of infection

Furadantin®

brand of nitrofurantoin

Available on Federal Supply Contract #GS-00S-33047

For the irritable G.I. tract

Milpath acts quickly to suppress hypermotility, hypersecretion, pain and spasm, and to allay anxiety and tension with minimal side effects.

AVAILABLE IN TWO POTENCIES

MILPATH-400—Yellow, scored tablets of 400 mg. Miltown (meprobamate) and 25 mg. tridihexethyl chloride.
Bottle of 50.

Dosage: 1 tablet t.i.d. at mealtime and 2 at bedtime.

MILPATH-200—Yellow, coated tablets of 200 mg. Miltown (meprobamate) and 25 mg. tridihexethyl chloride.
Bottle of 50.

Dosage: 1 or 2 tablets t.i.d. at mealtime and 2 at bedtime.

Available on Federal Supply Schedule

Milpath®

®Miltown + *anticholinergic*

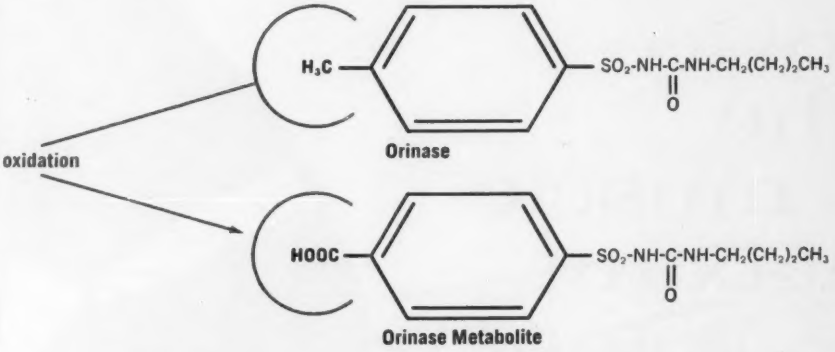
WALLACE LABORATORIES *Cranbury, N. J.*

Why is the methyl "governor" in Orinase so important?

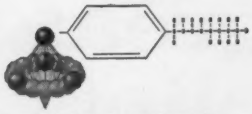
One of the most significant advantages of Orinase therapy is the rarity of associated hypoglycemic reactions.

This widely-reported clinical benefit is a function of the exclusive Orinase methyl "governor." Lending itself to ready oxidation (principally, it is thought, a hepatic process), the methyl group ensures prompt metabolic inactivation of the Orinase molecule. What actually happens is that a rapidly- and continuously-excreted carboxy-metabolite is produced that has no hypoglycemic activity at the existing levels.

As a result of the oxidation of its methyl group, Orinase shows a decline in activity soon after it reaches its effective peak in the plasma. Maintenance dosage serves to reduce blood sugar levels to normal, but rarely below that point, and there is no reported problem of accumulation.



Orinase*



An exclusive methyl "governor" minimizes hypoglycemia

Indications and effects: The clinical indication for Orinase is stable diabetes mellitus. Its use brings about the lowering of blood sugar; glycosuria diminishes, and such symptoms as pruritus, polyuria, and polyphagia disappear.

Dosage: There is no fixed regimen for initiating Orinase therapy. A simple and effective method is as follows: *First day*—6 tablets; *second day*—4 tablets; *third day*—2 tablets. The daily dose is then adjusted—raised, lowered or maintained at the two-tablet level, whichever is necessary to maintain optimum control.

Patients receiving insulin (less than 20 units)—discontinue insulin and institute Orinase; (20 to 40 units)—initiate Orinase with a concurrent 30 to 50% reduction in insulin dose with a further careful reduction as response to Orinase is observed; (more than 40 units)—reduce insulin by 20% and initiate Orinase with a further careful reduction in insulin dosage as response to Orinase is observed. In candidates for combined Orinase-insulin therapy, an individualized schedule is usually obtainable during a trial course of two or more weeks.

Contraindications and side effects: Orinase is contraindicated in patients having juvenile or growth-onset, unstable or brittle types of diabetes mellitus; history of diabetic coma, fever, severe trauma or gangrene.

Side effects are mild, transient and limited to approximately 3% of patients. Hypoglycemia and toxic reactions are extremely rare. Hypoglycemia is most likely to occur during the period of transition from insulin to Orinase. Other untoward reactions to Orinase are usually not of a serious nature and consist principally of gastrointestinal disturbances, headache, and variable allergic skin manifestations. The gastrointestinal disturbances (nausea, epigastric fullness, heartburn) and headache appear to be related to the size of the dose, and they frequently disappear when dosage is reduced to maintenance levels or the total daily dose is administered in divided portions after meals. The allergic skin manifestations (pruritus, erythema, and urticarial, morbilliform, or maculopapular eruptions) are transient reactions, which frequently disappear with continued drug administration. However, if the skin reactions persist, Orinase should be discontinued.

Clinical toxicity: Orinase appears to be remarkably free from gross clinical toxicity on the basis of experience accumulated during more than four years of clinical use. Crystalluria or other untoward effects on renal function have not been observed. Long-term studies of hepatic function in humans and experience in over 650,000 diabetics have shown Orinase to be remarkably free of hepatic toxicity. There has been reported only one case of cholestatic jaundice related to Orinase administration, which occurred in a patient with pre-existing liver disease and which rapidly reversed upon discontinuance of the drug.

Each tablet contains:
Tolbutamide ..... 0.5 Gm.

Supplied: In bottles of 50.

*Trademark, Reg. U.S. Pat. Off.—tolbutamide, Upjohn

June, 1961

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Available from your medical supply depot–FSN-6505-660-1600

The Upjohn Company, Kalamazoo, Michigan

Upjohn

twice
the
muscle
relaxant
potency
for greater
relief
of pain
and spasm

NEW PARAFON®

Combining a superior skeletal muscle relaxant[1-3] with a preferred musculoskeletal analgesic,[4,5] *new* PARAFON FORTE rapidly relieves *both* pain and muscle stiffness in low back disorders. Thus, the effective dual action of PARAFON FORTE increases the patient's range of motion and hastens recovery. PARAFON FORTE is equally effective in other musculoskeletal disorders, such as myositis, whiplash injuries, strains or sprains, and fibrositis. Side effects are rare, almost never require discontinuation of therapy.

FORTE

PARAFLEX® Chlorzoxazone* 250 mg.
TYLENOL® Acetaminophen 300 mg.

Dosage: Two tablets q.i.d. *Supplied:* Scored, light green tablets, imprinted "McNEIL," bottles of 50.

References: (1) Settel, E.: Clin. Med. *6*:1373, 1959. (2) Peak, W. P. and Smith, R. T.: Penn. Med. J. *63*:833, 1960. (3) Mayle, F. C.; Sullivan, P. D., an Auth, T. L.: Med. Ann. D. C. *28*:499, 1959. (4) Roth, J. L. A.: Med. Clin. N. Amer. *41*:1517, 1957. (5) Batterman, R. C., and Grossman, A. J.: J.A.M.A *159*:1619 (Dec. 24) 1955.

*U.S. Patent No. 2,895,877

379A61

McNEIL LABORATORIES, INC., Fort Washington, Pa.

McNEIL

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PRESCRIBED WITH CONFIDENCE FOR SIMPLE, EFFECTIVE CONTRACEPTION

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DO NOT DISTURB
...except to give him his daily tablet of Midicel®
(sulfamethoxypyridazine, Parke-Davis)
effective 24-hour sulfa activity with a single dose
• economical, convenient—helps preclude omitted doses...lets patient sleep through the night • rapid absorption, slow excretion—provides dependable bacteriostasis in urinary tract and other infections caused by sulfonamide-sensitive organisms • low dosage, high solubility—reduces the possibility of crystalluria
Indications: Gram-negative and gram-positive infections such as urinary tract, respiratory, and soft-tissue infections and bacillary dysenteries. Note: When prescribing MIDICEL, physicians should be guided by the usual precautions observed with other sulfonamides and bear in mind the nature of side effects commonly associated with these agents. See medical brochure for details of administration, precautions, and dosage. Supplied: MIDICEL (3-sulfanilamido-6-methoxypyridazine) is available as quarter-scored tablets of 0.5 Gm., in bottles of 24, 100, and 1,000.
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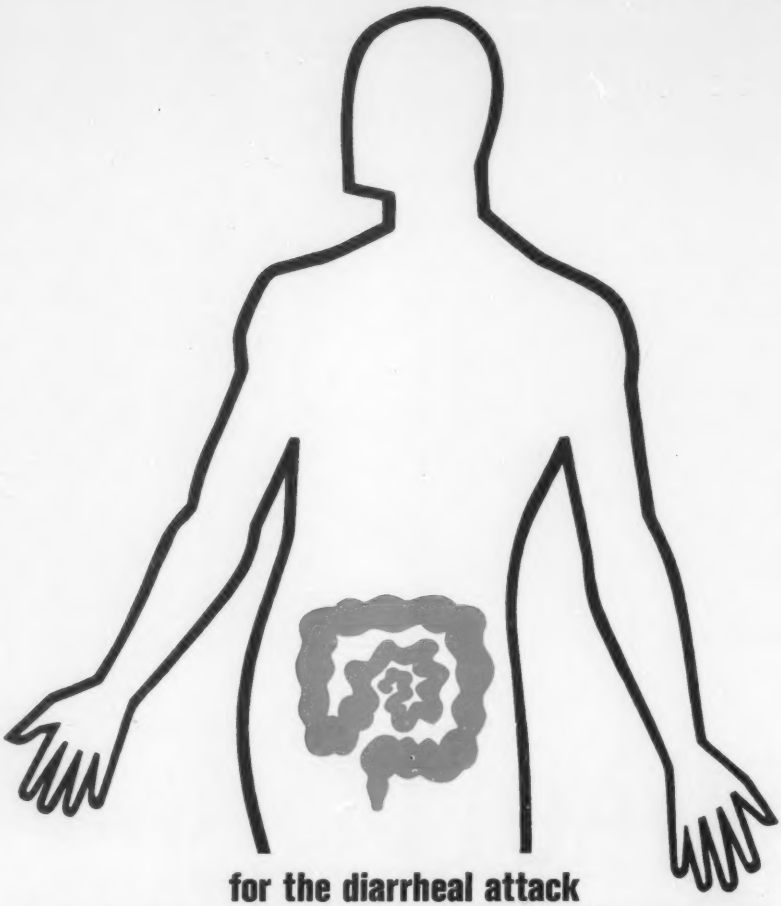

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selective—does not eradicate the normal intestinal flora[1]

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FUROXONE LIQUID is a pleasant orange-mint flavored suspension containing FUROXONE 50 mg. per 15 cc., with kaolin and pectin.

1. Mintz, A. A.: Antibiot. Med. 7:481, 1960.

EATON LABORATORIES, Division of The Norwich Pharmacal Company, NORWICH, N. Y.

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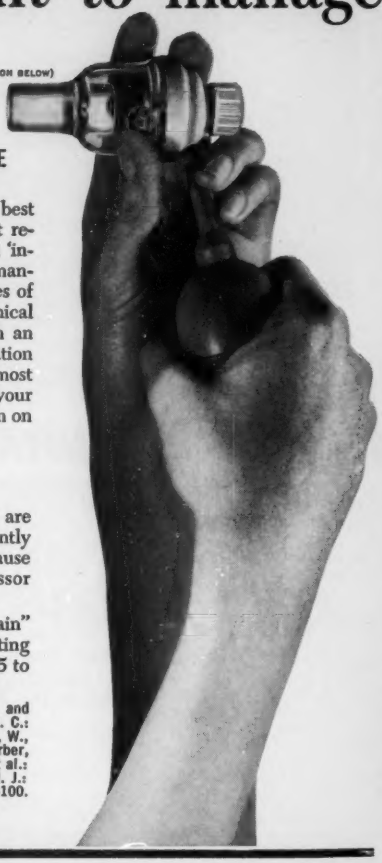
Free—a Vaponefrin® Inhalation Set for your difficult-to-manage asthma patient! (USE COUPON BELOW)



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*Bibliography available on request.

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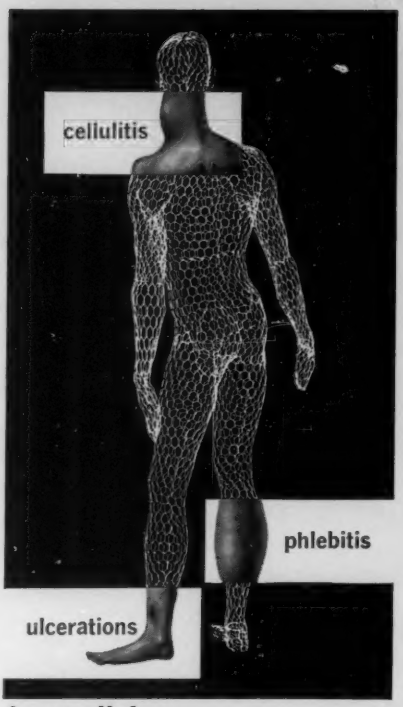

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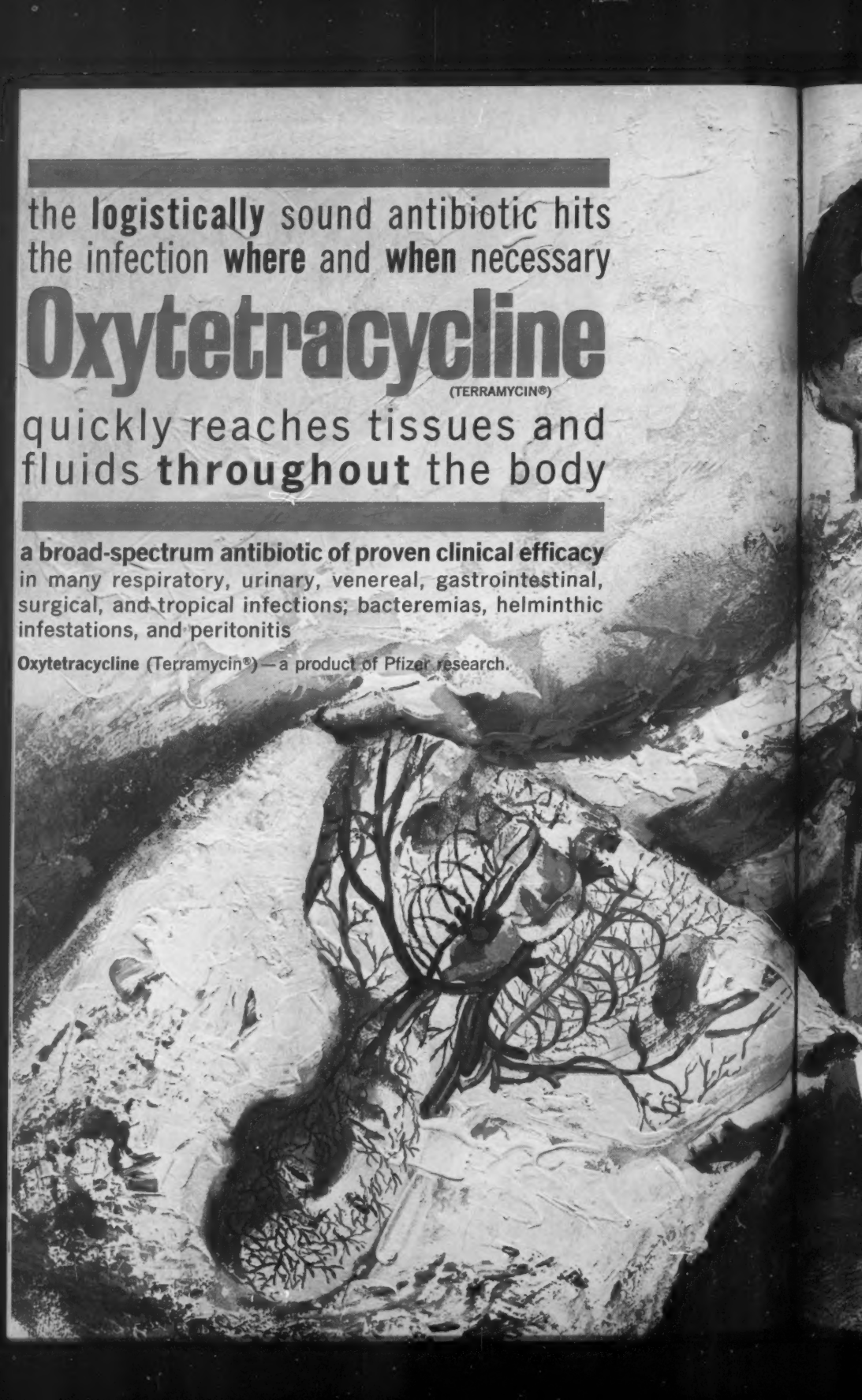
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in many respiratory, urinary, venereal, gastrointestinal, surgical, and tropical infections; bacteremias, helminthic infestations, and peritonitis
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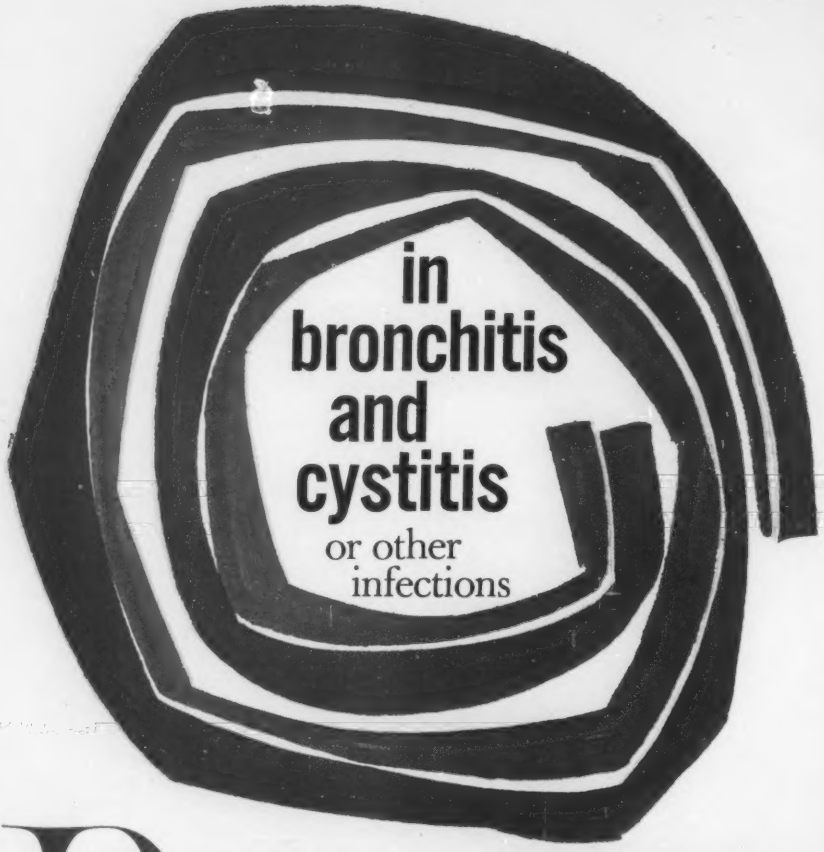

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References: 1. Senear, F. E., and Haeberlin, J. B., Jr.: M. Clin. North America, March 1958. 2. Brunsting, L. A.: Postgrad. Med. 26:431, 1959. 3. Crawford, L. V.: J. Pediatrics 53:99, 1958. 4. Shaw, C.: Clin. Med. 5: 1355, 1958. 5. Glaser, J.: Allergy in Childhood. Springfield, C. C Thomas, 1956.

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Ravdin, I.S.: J.A.M.A. 171:1357 (Nov. 7) 1959.

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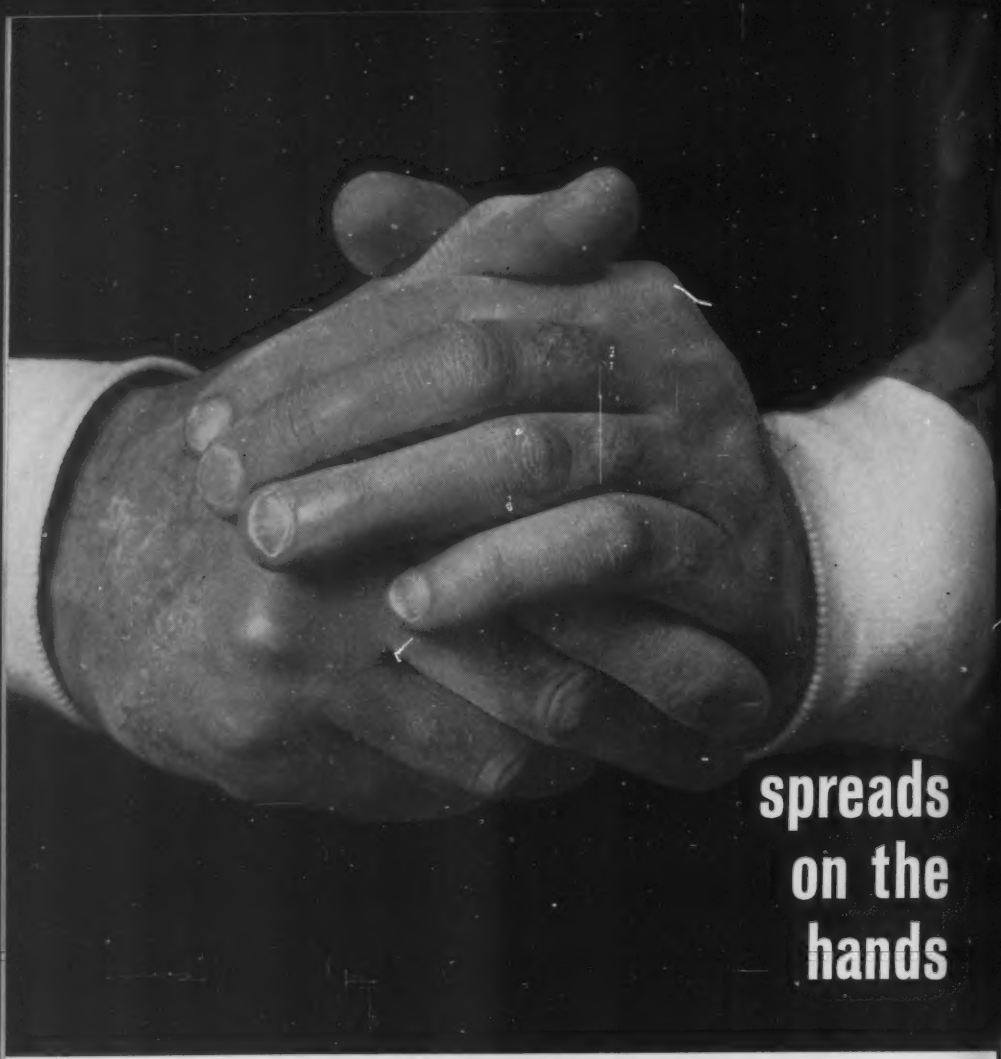

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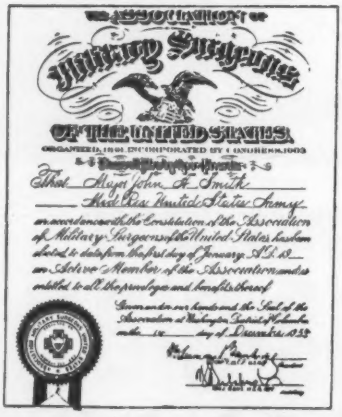

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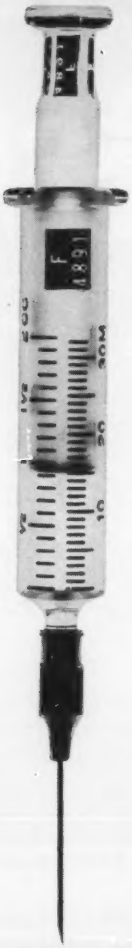

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*If desired, epinephrine may be used in infiltration anesthesia for hemostasis. Before administering be sure to consult Winthrop's literature for information about dosage, possible side effects and contraindications.

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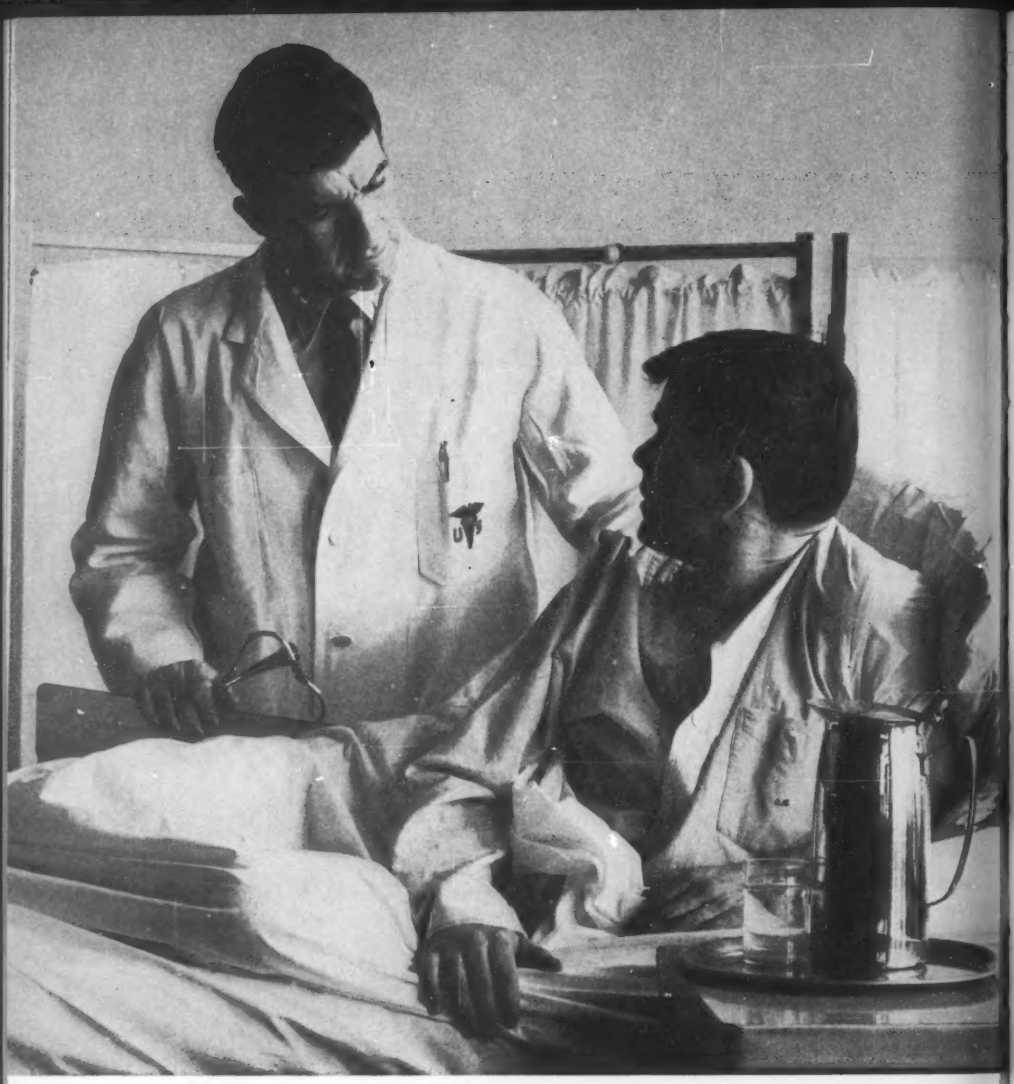

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